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#### **ABSTRACT**

This document reviews financial aid policies at 86 higher education institutions across the U.S. with implications for student admissions practices. Particular efforts were made to include in the sample colleges and universities with special characteristics, such as those enrolling a high proportion of minority students, those drawing their enrollment from predominantly urban areas, those limiting their student bodies to one sex, those with 2-year programs, those offering principally engineering and scientific curricula, and those with only liberal arts programs. The institutional data are analyzed by 2 methods: (1) the percentage of applicants seeking aid, the percentage of students receiving aid, the relative composition of the aid program and the sources of aid; and (2) stratification by type of cooperating institutions that the data may be examined by control, by size, and by region. (HS)



# COLLEGE ADMISSIONS AND FINANCIAL AID POLICIES AS REVEALED BY INSTITUTIONAL PRACTICES

A Study Conducted by
Robert P. Huff
Director of Financial Aid, Stanford University

for the Research Committee of the Panel on Student Financial Need Analysis (Cartter Panel)

U S DEPARTMENT OF HEALTH.

EDUCATION & WELFARE

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Submitted to the Panel in February 1971 Revised June 1971

Highlights of this study with its conclusions and recommendations are included in the Report of the Panel on Student Financial Need Analysis (pp. 15-32) entitled NEW APPROACHES TO STUDENT FINANCIAL AID, published by the College Entrance Examination Board in June 1971.

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College Scholarship Service College Entrance Examination Board

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# REPORT ON A STUDY OF COLLEGE ADMISSIONS AND FINANCIAL AID POLICIES AS REVEALED BY INSTITUTIONAL PRACTICES

(Cartter Panel)

# I. Goals and Background of the Study

In the spring of 1969 the College Scholarship Service of the College Entrance Examination Board undertook the first comprehensive analysis of its system of assessing student need for financial aid since the program was established in 1954. This review was assigned to a panel, under the chairmanship of Chancellor Allan Cartter of New York University, composed of economists, institutional financial aid officers and other college or university administrators and the representatives of several educationally-related organizations.

At a very early stage in the panel's deliberations, a proposal was made to its research committee by Professor Roy Radner of the University of California at Berkeley and Professor Leonard S. Miller of State University of New York at Stony Brook that a study of the relationships between student attributes and financial aid practices be undertaken. Such an investigation would seek to ascertain institutional goals and admissions and financial aid policies as revealed by actions rather than simply policy statements.

Noting that all \*.udents can be described in terms of certain characteristics such as academic achievement, test results, grades, and financial need, to identify a few of the more obvious, the two economists contended that these attributes represent a student when he seeks a place in an institution of higher education either with or without financial support. Because limited financial resources and notions of student capacity place restraints on enrollment, colleges and universities must rank their applicants according to explicit or implicit objectives and, as a consequence, establish admissions



and financial aid policies.

This investigation, it was felt by the research committee of the panel, should provide not only some significant answers about current financial aid practices, but should also allow the development of statistical models which could then be used to predict what might happen to admissions and financial aid decisions as the sources of aid funds or other conditions changed. Such analysis would permit, for example, forecasting the consequences of different federal aid programs on the size and composition of college and university student bodies. 1

Dr. Robert P. Huff, Director of Financial Aid at Stanford University, a member of the panel, agreed to conduct the initial phases of the study. He was able to arrange with the faculty of the Department of Statistics at Stanford for a doctoral candidate and a post-doctoral fellow to assist with the investigation. They were Mr. Dale Borglum and Dr. James Ware. Mr. David Harvey, a graduate student in Business at the University of Santa Clara, joined the research team in the summer of 1970 and assumed responsibility for computer programming and also assisted with the regression analysis. Technical advice on project design and method of analysis has been provided by a committee composed of Professor John Bishop of New York University, Dr. James Bowman of the Educational Testing Service, Mr. John I. Kirkpatrick of the College Entrance Examination Board and Professor Leonard Miller of the State University of New York at Stony Brook.



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See Appendix A for the original Radner-Miller proposal.

# II. Collection of the Data

In November of 1969 Chancellor Cartter wrote to the presidents or chief executive officers of 130 colleges and universities informing them of the purpose of the study and requesting that they cooperate by providing certain specified data. Description the letter was an institutional questionnaire which sought data on the number of applications for admission and financial aid, enrollment, capacity factors, tuition revenue, aid resources and unmet need. Also enclosed was a sample questionnaire on individual freshman applicants. The latter, which solicited information on such characteristics as Scholastic Apritude Test scores, secondary school grade-point average, religion, race, non-academic qualifications, admission decision, enrollment status, and financial aid data, was sent with the request that the institution consider completing the form on a random sample of its freshman applicants for the fall of 1969. Institutions were also asked to identify extent to which the desired information on freshmen was available in (a.9)-mated form.

It was originally hoped that most of the 130 colleges and universities would furnish institutional data and that about 40 would agree to provide information on individual freshman applicants so that an analysis could be made on about 20,000 observations.

The advisory committee devoted an extensive amount of effort to selecting the institutions of higher education which were to be asked to participate in order to assure the selection of a representative sample.<sup>4</sup> Taken into consid-

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See Appendix B and C, respectively, for a copy of Dr. Cartter's letter and a list of the institutions invited to participate.

<sup>2</sup> See Appendix D for a copy of the institutional questionnaire.

<sup>3</sup> See Appendix E for a copy of the individual questionnaire.

<sup>4</sup> See Appendix F for a table which categorizes invited institutions by control, size, region, and certain other characteristics.

eration were such factors as size, control, geographic location, academic selectivity and institutional wealth. Particular efforts were made to include in the sample colleges and universities with special characteristics, such as those enrolling a high proportion of minority students, those drawing their enrollment from predominantly urban areas, those limiting their student bodies to one sex, those with two-year programs, those offering principally engineering and scientific curricula, and those with only liberal arts programs.

# III. Responses to the Request for Participation

In total, 93 of the 130 institutions contacted acknowledged the request for information. Eighty-six of those responding agreed to furnish all or as much as possible of the institutional data. The institutional questionnaires were returned over a period commencing about the first of December and extending through the end of September, although most of them were in hand by the middle of April.

Forty-eight of the institutions contacted indicated that they would at least consider participating in the individual questionnaire phase of the data gathering. In total, 28,787 individual questionnaires on freshman applicants were sent to those institutions and 16,850 were ultimately returned with at least part of the requested data included. The number of colleges and universities which have furnished individual data total 35.

The colleges and universities agreeing to participate in the individual questionnaire phase were sent specific instructions on how to draw their sample and steps were taken by the graduate students in statistics, who assisted with the project, to insure that the sample sizes were of sufficient magnitude to insure valid analysis of practices. In repeated instances, institutions found it impossible to complete the number of questionnaires promised even though in some cases a modest allowance to aid with the cost of the undertaking was offered to them.

As a general rule the sampling instructions were prepared in such a way as to provide that one-half of the observations came from the admitted and one-half from not-admitted freshmen. The admitted group was further strati-



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See Appendix G for a table which categorizes the responding institutions by size, control, and region.

See Appendix H for a table which categorizes individual observations by types of institutions.

fied so that sixty per cent were aid applicants and forty per cent were not.

The collection of data on individuals has proven to be the most frustrating part of the entire project. It had been assumed in the beginning that many institutions had admissions and financial aid data in automated form and that it could be readily obtained. Such turned out clearly not to be the case. Not only was very little usable data located in automated form, but many institutions were found not to have it available in any form whatsoever. Visits to seve al colleges and universities in an attempt to persuade them to participate in the study revealed many almost primitive record keeping systems in operation. In many instances the data were not obtainable in any central location, but had to be secured from a number of different departments which viewed the study with varying degrees of enthusiasm. Some institutions declined to provide information on any applicants without their express permission, a development which lead to great difficulty and expense in an attempt to merge the collected data with the Educational Testing Service's file of freshman Parents Confidential Statement filers for the 1969-1970 academic year. It had been intended to utilize the ETS data, particularly for those aid applicants which an institution had not admitted, since in many instances the Parents Confidential Statement had not been retained.

# IV. The Institutional Data

#### 1. Introduction

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It should be noted that the 86 colleges and universities which responded with institutional data enrolled during the past academic year just over half a million undergraduates, which for the period was close to ten per cent of the estimated total undergraduate enrollment in the country. The total financial aid enjoyed by the undergraduate students at these 86 colleges and universities was just in excess of 193 million dollars. This total amounts to about ten per cent of the aggregate student aid resources which have been estimated as available for undergraduate students during the academic year 1969-1970.

# 2. Tabularization of the Results

The institutional data obtained from the 86 colleges and universities were analyzed by two methods. First of all, the answers to 27 questions pertaining to the percentage of applicants seeking aid, the percentage of students receiving aid, the relative composition of the aid program and the sources of aid have been tabled. As the table on the next page shows, cooperating institutions have been stratified by type in order that the data may be examined by control, by size, and by region.<sup>4</sup>

Some very interesting results are evident 'rom comparing the data by type of institution. For example, the percentage of gift aid contrasted to other forms of aid at the private institutions was almost three times what was found at public institutions. The extent to which public institutions

Edward Sanders and James Nelson, "Financing of Undergraduates, 1969-1970", Financial Aid News, July, 1970

See Appendix I for additional summary data concerning the institutions which responded.

<sup>3</sup> Sanders and Nelson, op. cit.

See Appendix J for the tables which present by institutional category the number of valid responses to the questions which were asked.

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relied on loans, particularly the federally insured program, contrasted to private institutions must also be deemed significant. Graranteed loans accounted for twenty-five per cent of the total aid at public institutions but only ten per cent at private ones. While the private colleges and universities controlled fifty-six per perf of the aid in their programs, the corresponding figure for to the ublic counterparts was only thirty-nine per cent.

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Interesting results are found by comparing types of student aid across the five regions of the country. The percentage of gift aid to other forms of student assistance was fifty-three per cent in the East contrasted with only twenty per cent in the Midwest. The latter region ran far ahead of the rest of the country in the percentage of total support provided by student employment, forty-one per cent. As for sources of aid, the South's reliance on the federal government for forty-five per cent of its total student aid, far exceeded that of the other four regions. The Midwest, in addition to reporting the highest percentage of total support in the form of student employment, also led in the use of loans with heavier reliance than elsewhere on the federally insured student loan program.

It had been hoped that the institutional questionnaires would yield some meaningful results in two areas of specific concern to the Cartter Panel. They were the unused student capacity of the institutions surveyed, particularly as the condition was related to insufficient financial aid resources, and who at the colleges and universities was making the decision on matters of student aid.

Unused capacity could not be measured quantitatively from the institutional questionnaires. Tabulating the indications of unused capacity and its

causes, provided by the institutions, yielded the following table:

Type	Public	Private	TO'TAL
Financial Aid	9	6	15
Insufficient Applicants	7	10	17
Both	88	7	15
TOTAL	24	23	47

Of the 86 institutions responding, 47 indicated they had unused capacity. Insufficient financial aid resources and insufficient applicants, both singly and together, were the important reasons for this underenrollment. There was no pattern between institutional type and reason; both had the same problems. Financial aid seemed more restraining to public colleges while insufficient applicants affected private institutions more than public.

On the matter of institutional decision-making, the questionnaire sought to distinguish between decisions on individual aid applicants and those affecting policy. The following table gives insight into which individual or kind of committee made these decisions on the 84 campuses for which responses were obtained:

Decision Type- Control	INDIVI	DUAL DEC	SION	POLICY DECISION				
Decision Maker	Public	Private	TOTAL	Public	Private	TOTAL		
Aid Officer	32	34	66	11	9	20		
Admissions Officer		3	3		2	2		
Faculty Committee		1	1	,	3			
Faculty-Administrative Committee	6	4	10	10	19	20		
Faculty-Administrative- Student Committee	3	1	4	17	8	<u>29</u> 25		
Other Officer				2	2	<u> </u>		
TOTAL	41	43	84	41	43	84		

The table has combined, under the individual decision heading, the specific determinations of who received aid, the amount of the support and form in which it was made available because all three were rather consistently found to be made by the same person or committee.

Perhaps the most significant finding was the predominance of the aid officers as responsible for making decisions on individual student applications. He had in better than seventy-five per cent of the responding institutions assumed the role which in earlier times was fulfilled more extensively by a committee. George Nash found in 1968 as a result of an inquiry made of 849 financial aid directors that seventy-six per cent of the time the financial aid committee made some of the individual decisions. Only twenty-six per cent of the time did it not decide individual cases. He suggested further that the role of the committee in individual decision making was directly proportionate to the size of the aid office's clerical staff. It is interesting to note that in twenty-four per cent

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George Nash, with Paul F. Lazarsfeld, New Administrator on Campus: A Study of the Director of Student Financial Aid. Unpublished report for the College Entrance Examination Board, Bureau of Applied Social Research, Columbia University, 1968, 7-14.

<sup>2 &</sup>lt;u>Ibid</u>, p. 7-17.

of the institutions whose aid programs were examined by this study, the aid officers were also making the policy decisions.

The table provides some idea, too, of the composition of the committees which worked with the individual and policy determinations of the 84 campuses. At thirty per cent of the institutions, the policy making bodies contained student representation.

while the results contained in the tables are certainly useful, a more sophisticated analysis of the data has been conducted by another means and requires a more detailed explanation in the next section as well as the methodology's application to answering specific questions. Before examining this second analytical technique, it should be noted that at the conclusion of the study each participating institution was furnished with a print-out of its own answers to the questions as well as a complete set of tables on all institutions so that appropriate comparisons could be made.

3. Prediction Equations: Some Linear Relationships within the Institutional Data Colleges and universities should find it useful to relate variables such as percentage of applicants seeking aid and sources of student aid to other characteristics of the institution in such a manner that predictions could be made about future values of these variables. To that end, multiple linear regression has been applied to the institutional data in an attempt to construct prediction equations for each of 22 institutional variables. The advisory committee selected ten independent variables to be considered in the regressions. Tuition, Control (public or private), Per Capita Gift Aid, Total Gift Aid Divided by Tuition, Regional Location, and Unused Capacity were obtained directly from the institutional questionnaires. Revenue per Student and Average



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For a numerical ordering of these variables, refer to Appendix K.

Ability of Students were derived from certain studies conducted by the American Council on Education; Average Parental Income data came from the Parents' Confidential Statement records of the Educational Testing Service; and Racial Composition of institutions was taken from tables published in the Chronicle of Higher Education on April 21, 1969. These independent variables were used to construct moderately to highly accurate prediction equations for each of 22 dependent variables. The dependent variables, classified into five groups, included:

- A. Percentage of Applicants Seeking Aid
  - Al. Freshmen

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- A2. Transfers
- B. Percentage of Students on Aid
  - Bl. Freshmen
  - B2. Transfers
  - B3. Other Undergraduates
- C. Type of Student Aid
  - Cl. Gift Aid per Student on Aid
  - C2. Gift Aid per Enrolled Student
  - C3. Gift Aid as Percentage of Total Aid
  - C4. Gift Aid as Percentage of Tuition Income
  - C5. Loan Aid as Percentage of Total Aid
  - C6. Job Aid as Percentage of Total Aid
- D. Sources of Student Aid
  - D1. Institutional Aid per Student on Aid
  - D2. Institutional Aid per Enrolled Student
  - D3. Institutional Aid as a Percentage of Total Aid
  - D4. Federal Aid per Student on Aid
  - D5. Federal Aid as a Percentage of Total Aid
  - D6. State Aid per Student on Aid
  - D7. State Aid as a Percentage of Total Aid
  - D8. Guaranteed Loan Aid per Student on Aid
  - D9. Guaranteed Loan Aid as a Percentage of Total Aid
- E. Average Total Aid
  - El. Per Student on Aid
  - E2. Per Enrolled Student

By means of linear regression analysis, it was possible to estimate the linear relationship between each dependent variable and ten independent variables describing important institutional characteristics.

#### These were:

- I Control (0 = Private; 1 = Public)
- II Average Parental Assets of students filing a Parents' Confidential Statement (\$00's)
- III Tuition (\$00's)
- IV Ability (Average SAT score)
- V Per Capita Gift Aid
- VI Total Gift Aid divided by Tuition
- VII Revenue per Student (\$000's)
- VIII Regional Location (East is control, add VIIIA for Southwest, VIIIB for West, VIIIC for Midwest, VIIID for South)
  - IX Unused Capacity (0 = no; 1 = yes)
  - X Race (% black student enrollment)

For each of the 22 dependent variables, the table on page 15 gives the significance level of the regression; R<sup>2</sup>, the percentage of variation of the dependent variable explained by the regression; and the principle contributing independent variables. One star indicates significance at the .10 level, two stars the .05 level, and three stars the .01 level.

For example, the regression for Al was significant at the .01 level. This means that the relationship evident would be found among unrelated variables only once in 100 trials. Note that  $R^2 = .43$ . This means that 43% of the variation in Al could be related to variation of the independent variables. The principle independent variable to be identified was X, the percentage of black students enrolled, which was significant at the .01 level. For a complete summary of the results, including the regression coefficients, the correlation coefficients, and the F values, see Appendix K.

Summary Table of Results of Linear Regression Analysis of Institutional Data

-15-

	Significance Level (F)	2	
Dependent Variable	of the Regression	$\mathbb{R}^2$	Principal Independent Variables
A1	.01	. 43	X***
A2	.025	.30	X**
<b>B1</b>	.01	. 58	X***
В2	.025	. 47	V*, VI*
в3	.01	.65	X***
C1	.01	.87	II**, III**, VIIIB*
C2	.01	.91	I***, II*, IV*
с3	.01	. 92	II**, IV*, VIIIA**, VIIIB*
C4	.01	.90	II**, VIIIA***
C5	.025	.78	III**, VIIIA**, VIIIB*, VIIIC*
<b>C6</b>	.05	.79	I*, VIIIC*
D1	.025	.69	III**, IV*
D2	.01	.70	[***
03	.025	.56	II*, VIIIC**
D4	.10	. 60	
D5	.01	.88	I**, II**, VIIIC*, IX***
D6	.10	.62	V*
D7	not signif.	. 47	
D8	not signif.	. 52	IV*, VIIIC*
D9	not signif.	.54	IV**, VIIIC**, VIIID*
E1	.025	.67	III**
E2	.01	.79	I**, IV*, X***

In reviewing the Summary Table on page 15, notice that all but three of the regressions were statistically significant and the R2's were consistently high. Thus, the regression equations detected strong relationships. Page 12 of Appendix K reports the covariance matrix for the independent variables. The matrix shows that the independent variables were highly multi-colinear. This means that the regression equations detected the overall relationships, but the effects of individual variables tended to be mixed. A systematic resolution of that problem requires step by step deletion of the nonsignificant independent variables. At this stage, the analysis has established that the relationships do exist and has identified the important independent variables.

For example, the percentage of applicants seeking aid and the percentage of students receiving aid were found to be strongly related to the percentage of black students. The percentage of freshman applicants for aid and the percentage of freshman receiving aid were estimated to increase .3% and .2% for every increase of 1% in the percentage of black students in the student body. The type of student aid being used by institutions was influenced by a number of factors. Gift aid averaged \$400 less at public institutions and job aid \$20 more. As average parental assets increased (Variable II), gift aid tended to decline, both in magnitude (\$8 per \$100, C1) and percentage (.3% per \$100, C3). Gift aid was more available ar schools with higher tuition and replaced loan aid in the aid package. Also, schools with high ability students tended to have larger gift aid programs.

There were some interesting regional effects, even after controlling for tuition, average revenue and removing the effects of public versus private institutions. Those institutions in the sample from the South, South-

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west, and West had larger gift aid programs, those in the Midwest larger job programs, and those in the East larger loan programs. For example, gift aid was 25% more of the aid package in the Southwest and 14% more in the West than in the East, and job aid was 16% more of the aid program in the Midwest than in the other regions.

For sources of student aid, there were fewer significant effects. Institutional aid programs increased and guaranteed loan aid decreased as average ability increased. Institutional aid per student on aid increased \$50 for every \$100 increase in tuition, an indication that rising tuition costs are being offset for many students. Institutional aid per enrolled student averaged \$182 less at public institutions. The Midwestern schools in the sample reported substantially larger institutional aid programs and smaller federal aid programs and guaranteed loan programs.

The regression for the variable E2 showed that aid per enrolled student was \$319 less at public institutions and increased \$7 for every increase of 1% in the percentage of black students.

In general, these results are consistent with those from the individual questionnaire analysis, namely that ability of students and high tuition cost were associated with the availability of aid funds, and that the average aid received did not correlate with parental assets; that is, students from more prosperous families attended higher cost institutions, and as a consequence received as much aid as their less well to do counterparts. Furthermore, these students tended to receive a greater proportion of their aid package in the form of gift aid.

More accurate estimation of the coefficients in these regressions poses no technical difficulties, but could not be completed in time for this report.

# V. The Individual Data

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# 1. Introduction

One of the objectives of this study has been to collect data on individual applicants from some of the participating colleges and universities for the purpose of attempting to answer four basic questions about admissions and aid policies at these institutions. These questions were:

- a) How do academic criteria, race, and financial need affect a student's probability of admission to a certain institution?
- b) What is the effect of these criteria on the percent of a student's financial need which is being met?
- c) What is the effect of the above criteria on the proportions of grant, loan, and job aid offered the student?
- d) To what extent are institutions modifying the College Scholarship Service need analysis?

To obtain the answers, 35 institutions were asked to fill out individual questionnaires on from 200 to 1000 of their freshman applicants, divided equally between accepted and non-accepted applicants. These questionnaires asked for name, social security number, SAT score, high school GPA, admissions decision, and other attributes. In the matter of financial aid information, the questionnaire requested that PCS filers be identified, CSS computation of their family contribution, along with any institutional adjustments, be reported, and financial aid offers from all sources be reported.

The 35 institutions returned a total of 16,850 questionnaires, and whenever possible these questionnaires were matched with PCS data obtained from the Educational Testing Service. The combined data were then tabulated in

<sup>1</sup> See Appendix E for a copy of the questionnaire.

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various forms and submitted to a variety of analyses in an attempt to answer the four questions. The results of the investigations of the individual questionnaires are presented in the subsequent pages. The answers to questions a, b, and c because of their similarity of form, are considered together by institution in Section 2, and question d is discussed in Section 3.

# 2. The Relationships of Admissions and Aid Practices to Student Attributes

This portion of the report deals with questions a, b, and c posed in the introduction. The aim was to measure the extent to which various student attributes affected the probability of admission, the percentage of need met, and aid packaging at 35 colleges and universities.

With regard to questions b and c, Table I contains some tabular results. For each of the 35 institutions, the institutionally adjusted average need was computed for the set of all accepted PCS filers. This was compared with the average aid offer for the same set of students to arrive at a figure for average percentage of need met. This figure included those accepted PCS filers who were not granted aid. The last three columns of this table report the average aid package. Whenever possible, this information was taken from the institutional report of aid resources, otherwise it represents the average aid package for the sample of accepted PCS filers. These data will be useful in interpreting other findings reported in this section.

The student attributes represented in the analysis are SAT score, high school GPA or Rank in class, Financial Need, Race, and Race x Financial Need. Since Race has a value of 1 for non-white students, and 0 otherwise, this last variable was intended to measure the marginal effect of Financial Need among non-white students. The objective of the analysis was the determination of the role of each student attribute in each of the aid and admissions decisions, namely admission, percent of need met, and composition of the aid package.

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EXTENT TO WHICH INSTITUTIONS MEET ADJUSTED NEED, AND COMPOSITION OF AID PACKAGE

	Number of Accepted PCS Filers	Institution Adjusted Ave. Need	Average Offer	Percent of Inst. Need Met	Percent Grant	Percent Losn	Percent Job
		LARGE PRIVA	TE INSTITUT	TIONS			
Institution I	155	\$1,928	\$1,894	98%	74%	018	
Institution IV	199	1,851	1,566	84	7 <b>4%</b> 70	21%	5%
Institution III	217	1,904	1,822	95	70 70	30	0
Institution II	68	2,318	2,197	95	76 74	15 24	15
Institution V	54	1,988	1,687	84	61	24	2 15
		MEDIUM PRI	VATE INSTIT	UTIONS			
Institution VI	122	\$2,075	\$1,711	82%	7.09		
Institution XIII	<b>25</b> 7	1,709	1,163	68	79 <b>%</b> 79	21%	0%
Institution IX	87	1,423	1,190	84	44	21	0
Institution XIV	119	1,593	915	57	76	36	20
Institution VIII	75	1,742	1,613	93	51	24	0
Institution XII	147	1,720	1,648	96	52	43 30	6
Institution X	16	967	749	77	41	=	18
Institution VII	79	1,708	1,596	93	45	39 38	20
Institution XI	144	1,856	1,643	88	88	12	17 0
		SMALL PRIVA	TE INSTITU	TIONS			
Institution XVII	88	\$2,094	\$2,165	102%	255		
Institution XVIII		1,394	1,541	103%	85%	15%	0%
Institution XVI	74	1,671	1,621	111 97	85 70	15	0
institution XV	75	1,588	1,021	66	70	20	10
Institution XIX	115	2,177	2,008	92	47 62	33	20
		- •	-, -,	74	62	35	3

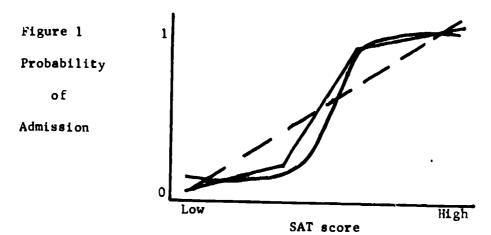
-21TABLE I (continued)

	Number of Accepted PCS Filers	Institution Adjusted Ave. Need	Average Offer	Percent of Inst. Need Met	Percent Grant	Percent Loan	Percent Job
		LARGE PU	BLIC INSTI	TUTIONS			
Institution XXII	171	\$ 676	\$ 560	83%	30%	37%	33%
Institution XX	201	560	614	113	20	35	45
Institution XXIII	174	641	476	74	64	24	12
Institution XXI	255	642	754	117	66	19	15
		MEDIUM P	UBLIC INST	ITUTIONS			
Institution XXX	233	\$ 802	\$ 744	93%	54%	447	2%
Institution XXVII	168	715	825	115	21	49	30
Institution XXXI	115	941	634	67	59	26	15
Institution XXVI	58	1,217	866	71	51	46	3
Institution XXV	198	572	396	69	41	30	29
institution XXXII	91	783	716	91	40	46	14
Institution XXIV	110	497	459	92	54	28	18
Institution XXIX	62	988	1,037	105	39	27	34
Institution XXVII	I 56	816	873	107	49	32	19
		SMALL PU	BLIC INSTIT	rutions		-	
Institution XXXII	I NA						
Institution XXXV	25	\$1,025	\$ 860	£ 3%	28%	19%	53%
Institution XXXIV	78	761	925	120	24	52	24

The results reported here were primarily derived from the methods of linear regression analysis, although the analysis of admissions data was carried somewhat further. As was explained in an earlier section, linear regression analysis attempts to measure some underlying linear relationship of the form:

where Y is, for example, the probability of admission, and  $X_i$  represents the various student attributes. Linear regression analysis estimates the coefficients  $\beta$ . In fact, one would not expect the actual relationship between these three decisions and the student attributes to be so simple. At some institutions, these decisions were undoubtedly influenced by other non-quantifiable student attributes, such as attendance at a private secondary school or promise as a college athlete. The linear regression analysis should be viewed as an attempt to approximate the effects of the quantifiable independent variables and to discover the extent to which this linear approximation actually characterised these three decisions.

In investigating the relationship between probability of admission and student attributes, a second method of analysis was employed. One might hypothesize that the relationship between SAT score and probability of admission is actually an S shaped curve (Figure 1).



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Students with low SAT scores have almost no chance of admission, there is a range where probability of admission rises rapidly with SAT score, and students with scores above a certain level have an approximately equal probability of being admitted. The broken line in Figure 1 shows the limitation of a linear description of such a policy.

The second approach is a two stage analysis. The sample is first divided into several groups, for example, the low, middle, and high SAT groups, and linear regression is applied within the three groups. The result might be something like the three straight lines in Figure 1, a considerably improved description of the underlying situation.

The second method of analysis was applied to the 14 institutions reporting the most complete data. The analysis was performed with a computer program called the Automatic Interaction Detector (A.I.D.) which identifies the most important independent variable and divides it into regions which maximize the variation of the dependent variable between groups.

The results of the analysis are reported by participating institutions in Appendix L and interpreted, again by institution, in the pages which follow. A detailed introduction to reading Appendix L is contained in the immediately following discussion of Institution I. At the end of the discussion of individual institutions, a summary table of the principle results over all institutions is presented and discussed.

# A. PRIVATE INSTITUTIONS

#### Institution I

The six tables under the heading Institution I in Appendix L illustrate the kind of results which will be discussed in this section. Table



l gives the results of a linear regression of probability of admission with race (white vs. non-white), SAT score, high school GPA, and financial need. Note that the observations on the dependent variable are 0 (not admitted) or 1 (admitted). The regression coefficients for race, SAT, GPA, and financial need were 0.33989, 0.00044, 0.00228, -0.00005, respectively. Thus the probability of admission increased .34 for black students, increased .04 for each 100 point increase in SAT, and .23 for each point increase in GPA, while decreasing .005 for each \$100 increase in financial need.

The ratio of the regression coefficient to the standard error is a t statistic whose square is the F value which appears in the tables in Appendix L. A value in excess of 2.72 is significant at .10, in excess of 3.84 is significant at .05, and in excess of 6.64 is significant at .01. Significant F values are denoted by one, two, and three scars. The values are 23.03, significant at .01, and 7.30, 9.02, and 8.20, all significant at .01. The cumulative R<sup>2</sup> represents the percentage of variation of the independent variable explained by the independent variable and those listed above it. Thus race alone explained 2% of the variation in the admissions decision; race and SAT explained 7% of the variation, and although each independent variable was statistically significant, together they explained only 11% of the variation, an amount which was unusually low. Note that the number of observations was 475 and the F level of the overall regression was 14.54, significant at .01. Tables 2-5 are read in a similar fashion and the dependent variables are percentage of need met, percentage of grant aid, percentage of loan aid, and percentage of job aid.

tor Program. The program found that a maximum of 6% of the total variation of the dependent variable could be explained by splitting the observations into two groups. This was achieved by splitting on the variable GPA at the value 3.96. Probability of admission was .75 in the high GPA group which had 99 cases and .43 in the low GPA group which had 400 cases. A further split at GPA = 3.82, explained another 1% of the variation. With this introduction to the tables in Appendix L, it is possible to interpret the results.

This highly selective institution with high tuition costs was one of a group of institutions at which admissions policy could not be successfully quantified by the linear model. The linear regression explained only 11% of the variation in the admissions decision for this sample. Thus almost 90% of the variation must be attributed to nonlinear effects or other student attributes. This institution was one of several highly selective institutions at which the data suggests that the admission decision was not based upon SAT and GPA. Applicants to these institutions had such uniformly high academic records that selection was undoubtedly based primarily upon a variety of other student attributes. This was confirmed by the attempt to explain the admissions decision by grouping (Table 6) which explained only 7% of the variation. For a full understanding, these results should be compared with those of other institutions.

There was an increase in probability of admission of .34 for black students, while probability of admission declined .005 for every \$100 increase in need. Thus, as a linear approximation, a student with need of \$2000 had 10% less chance to be admicted than a similar student with no

need. It is important to emphasize that financial need is a variable which may reflect a variety of socioeconomic factors.

Table 2 describes the linear regression of percentage of need met (aid divided by need) on SAT, GPA, financial need, and race. Notice that academic attributes are not significant. The significance of race again reflects the minority recruitment as percentage of need met is 25% higher for black students. The coefficient of -.03 for financial need implies that the linear approximation to this relationship was a 3% decline in percentage of need met for every \$100 increase in need. his effect was significant at .01.

Tables 3-5 represent the linear regressions for composition of the aid package. Since percentage of grant, loan, and job aid add to 100%, these tables should be considered together. Notice the coefficients for race which imply that the black student received 11% more of his aid as grant aid. Notice also that percentage of grant aid increased slightly with need while the percentage of loan aid decreased slightly overall. The R<sup>2</sup> for aid packaging was low, implying that aid packaging decisions were not primarily based upon these attributes at Institution I.

# Institution II

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Table 1 of Appendix L (Institution II) shows that a linear model explained 58% of the variation in the admissions decision at this school. Applying the A.I.D. program (Table 6) resulted in an R<sup>2</sup> of .73. Thus at this large private school, admission policy was almost fully explained by academic attributes. Note however, that financial need was significant and had its effect primarily in the low GPA group (.02 per \$100, Table 1b). Note that the A.I.D. program isolated one group with a .05 probability of

admission and another with probability of .94. The effect of need in the low GPA group was estimated at a 16% decrease in probability of admission for a \$1000 increase in need. However, applying regression at stage 2 gave  $R^2 = .68$ , compared to .73 by applying A.I.D. a second time. The percentage of need met decreased 15% for every \$100 increase in need and academic factors were not important. Tables 3-5 show that aid packaging was not effectively characterized, as  $R^2$  did not exceed .04 and no significant effects were detected. The inference is that aid packaging was not based upon need or academic qualifications.

#### Institution III

At this highly selective institution, the results followed those at Institution I. Neither linear regression nor grouping successfully explained admissions policy (R<sup>2</sup> = .14) although ability attributes were important. Need was not a significant variable. Presumably admissions policy depended upon other student attributes. The results for percentage of noed met were striking in that both need and ability attributes had significant coefficients. Percentage of need met was estimated to decrease 3% per \$100 increase in need and increased 29% with a 1 point increase in GPA. Aid packaging, on the other hand, did not depend upon academic attributes while the percentage of grant aid increased with need. This is in accordance with CSS recommended policy.

#### Institution IV

This large, less selective, private institution appeared somewhat similar in policy to Institution II. Admissions policy was highly explained by ability attributes and need was not a factor. Percentage of need met was significantly related to need, and once again ability was

important as students at the top of the class were awarded 9% more of their need than students at the top of the second quartile. Aid packaging was not well characterized, although a weak positive relationship (2% per 100 points) was detected between SAT score and percentage of grant aid.

# Institution V

At this large, moderately prosperous institution, admissions policy was highly explained by the linear model as both need and ability variables were significantly related. Probability of admission was estimated to decrease .6% for each \$100 increase in need. However academic factors explained 50% of the variation of the admissions variable.

From Table 2, it may be inferred that percentage of need met depended upon both need and ability factors, decreasing 4% for every increase of \$100 in need. This relationship contributes .47 to R<sup>2</sup>. There were two interesting effects in aid packaging. Percentage of grant aid increased with ability, and loan aid increased while job aid decreased as need increased. Thus bether students were given grant aid while high need students were given aid in the form of loans.

#### Institution VI

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This high tuition, selective institution is another case in which financial need was a significant factor in the admission decision, although the relationship was only -.004 per \$100. Ability factors accounted for 43% of the variation in the admissions decision. Applying the A.I.D. package improved R<sup>2</sup> to .51, which suggests the existence of a threshhold level for admission, based upon ability attributes.

Percentage of need met was found to decrease 7% per 100 point increase in SAT score and only 1% per \$100 increase in need. There were no signifi-

cant relationships for aid packaging. Hence this institution apparently based aid decisions on policies consistent with CSS recommendations.

#### Institution VII

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This institution reported only one ability factor, GPA. Need was significant for admission (-.03 per \$100), percentage of need met (-5% per \$100), and percentage of grant aid (3% per \$100). Thus the evidence is that needy students were less likely to be accepted, were awarded a smaller percentage of their need, and received a greater percentage of their aid in grant form. As will be discussed in the concluding remarks, these relationships must be interpreted conservatively, since there was only one control variable. The effects attributed to financial need no doubt hold effects which could be differentiated into a variety of other socioeconomic factors.

#### Institution VIII

At this institution, admission probability did not depend upon need. However, the admission decision was not well characterized by the linear model. Nor did the A.I.D. package have a high  $R^2$ . This highly selective institution did not base admission upon ability factors.

Percentage of need met and percentage of grant aid both depended upon ability factors, as percentage of need met increased 6% and percentage of grant aid 9% for a 100 point increase in SAT score. Thus, the institution apparently used aid as an incentive for strong students. Note that grant aid amounted to only 51% of the aid program.

#### Institution IX

Probability of admission declined 1% for each \$100 increase in need.

Percentage of need met increased 1% and percentage of grant aid 6% for

every 100 point increase in SAT score. Notice from Table I that this institution met 84% of need and had only 44% of its aid in the form of grants. Thus, needler students had more unmet need and grant aid was used to recruit strong students.

# Institution X

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At this institution, admission probability was strongly affected by need (-.03 per \$100) as was percentage of need met, while aid packaging depended heavily upon ability attributes. Notice from Table I that this institution had relatively small aid resources, particularly in grant aid. The institution chose to make a smaller percentage of funds available to needier students and to use grant aid as a recruiting aid. This was typical of private institutions with limited aid resources.

# Institution XI

This prosperous institution showed a very small relationship between admission probability and need, and the highly qualfied applicant pool was reflected in low R<sup>2</sup> for the admission decision. Aid practices were disadvantageous to needy students, however, as percentage of need met decreased 4% and percentage of grant aid 1% for every \$100 increase.

# Institution XII

At this women's college, black students had a 17% greater probability of admission, 67% greater percentage of need met, and a 46% increase in the percentage of grant aid. Financial need, however, reflected negatively on the probability of admission (2% per \$100). This illustrates the situation in which minority recruitment existed side by side with admission disadvantages for needier students. There was a strong indication of grant aid being used for recruitment. This institution had only 52% of its aid resources in grant aid, and the percentage of grant aid received increased 12% for every

increase of 100 points in SAT score.

# Institution XIII

This institution also gave evidence of a minority recruitment program.

Black students had .15% greater probability of adm.ssion, but no aid effects.

The effect of need on admission was only -.004 per \$100. Percentage of need met decreased 4% for every \$100 increase in need and there was evidence that grant aid was used as a recruiting tool, as percentage of grant aid increased 6% for a 100 point increase in SAT score.

# Institution XIV

The coefficients for percentage of black students should be disregarded, since the number of black students in the sample was small. Need was not a factor in the admission decision. Students with high SAT scores received a greater percentage of their need in aid and a \$100 increase in need decreased percentage of grant aid by 1%. These two effects are contrary to CSS recommendation.

# Institution XV

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Two effects were notable. Percentage of need met decreased 4% for every \$100 increase in need and grant aid increased very sharply with ability attributes. This institution had only 47% of its aid in grant form, and the grant was given selectively to the stronger students.

# Institution XVI

This institution is one at which the admissions decision was highly described by the analysis. Financial need was a factor in admission, but notice from Tables 1b and 1c that this effect was limited to the low SAT group. Black students had a greater probability of admission, and this effect was also limited to the low SAT group. Percentage of need met de-

creased 2% with a \$100 increase in need and there were no significant effects for aid packaging.

#### Institution XVII

Again at this institution, financial need was a factor in the admission decision (.007 per \$100), and the effect was slightly greater in the high SAT group. Percentage of need met decreased 3% for each \$100 increase, and class rank had a marginal significance for the aid decisions.

#### Institution XVIII

This institution's data suggested a minority recruitment program, as black students had greater probability of admission, particularly in the low SAT group. However, black students did not receive preferential aid treatment. Financial need had a very small, though significant, relationship to admission probability. Percentage of need met decreased 3% and percentage of grant aid increased 1% for every \$100 increase in need.

#### Institution XIX

The admission and aid policies at this selective school were only weakly characterized. Need was not significant in the admission decision and percentage of need met decreased as need increased. However, the percentage of grant aid increased with need.

#### B. PUBLIC INSTITUTIONS

Most public institutions reported only one dimension of ability, typically some measure of high school performance. Thus, the financial need effect must be interpreted very generally as including all those effects correlated with financial need as, for example, one would expect SAT score to be negatively correlated with need.

#### Institution XX

The data indicate that admission was negatively correlated with need (-.02 per \$100). This strong effect is partly explained by the introductory comments. Financial need sharply decreased the percentage of need met (-11% per \$100) and grant aid increased 2% per \$100 of need.

#### Institution XXI

This prestigious state university has aid programs which were apparent from the results, as percentage of grant aid was 11% higher for students whose GPA was one point greater. The relationship between need and the probability of admission was significant but weak (-.004 per \$100) and as at Institution XX, the relationship between need and percentage of need met was very strong. This reflects the inability of this institution to meet large need.

# Institution XXII

This institution reported data similar to that of the previous two schools. Financial need was marginally disadvantageous to admission (-.07 per \$100), and it seems clear that this was an indirect effect at this large public school. Aid offered did not increase in proportion to need, as the percentage of need met decreased 11% for every \$100 increase in need. Finally, this institution awarded grant aid on the basis of ability, as students at the top of their class received more aid than those at the top of the second quartile.

#### Institution XXIII

The admissions policy of this institution is primarily of the threshhold type as the results of the A.I.D. program indicate a threshhold GPA of 3.0 (Table 6). Although financial need was not significant for the total population, it had a significant negative effect for the low GPA group. Financial need had a relatively weak relationship to percentage of need met and there were no significant effects for aid packaging.

# Institution XXIV

This institution reported admissions and aid results common to many public schools. Financial need had a weak negative relationship with admission, but this school was unable to offer sufficient aid to high need students, as percentage of need met decreased 8% for every \$100 increase in need. There was strong evidence of grant aid being used for recruitment, as grant aid was 25% greater for those at the top of their class than for those at the top of the second quartile.

### Institution XXV

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Agair, the findings were typical of most public institutions. Admission probability did not depend upon financial need, but the percentage of need met decreased sharply as need increased (-10% per \$100) and students with high rank in their high school class were given priority for grant aid resources.

# Institution XXVI

Financial need was not a significant factor in the admissions decision, which was almost completely explained by GPA ( $R^2 = .77$ ). Percentage of need met declined 6% for each \$100 increase in need, and an increase of one point in high school GPA resulted in an increase of 31% in the percentage of grant aid offered.

# Institution XXVII

Typical effects were a 9% decrease in the percentage of need met with a \$100 increase in need and a 22% increase in the percentage of grant aid with a one point increase in ability. There was a small but significant

negative relationship between need and probability of admission and as need increased, grant aid increased in proportion while job aid decreased.

### Institution XXVIII

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This institution reported the most severe penalization for financial need of any participating school. Disregarding the regression for probability of admission (the school reported only four non-accepted PCS filers), the estimated linear relationship was a 17% decrease in percentage of need met for a \$100 increase in need.

### Institution XXIX

This institution reported admission and aid policies consistent with CSS recommended policy. Pinancial need was not significantly related to probability of admission, percentage of need met declined a relatively low 3% per \$100 increase in need. However, students at the top of their class received 25% more of their aid package in grant aid than did those at the top of the second quartile.

### Institution XXX

This institution reported data on only six non-admitted students, so admissions policy could not be investigated. Percentage of need met did not depend upon need and there was a weak positive relationship between GPA and the percentage of grant aid.

### Institution XXXI

At this institution only eight non-accepted PCS filers were reported. Thus the significance of financial need in the admission decision is based upon a very small sample. Results for percentage of need met were unusual in that an increase of one point in GPA was associated with 38% increase in the percentage of need met. Grant aid increased 15% as GPA increased one

point. And both of these variables were negative'y associated with financial need. Thus at this institution, both the total aid program and the grant aid program were used for recruiting strong students.

# Institution XXXII

Only admissions and need information were available. The probability of admission was estimated to decline .02 for every \$100 increase in need.

# Institution XXXIII

This institution reported only five PCS filers in its non-accepted group. Thus, the significant need effect for admission was based upon a very small sample. Notice that this effect was restricted to the low GPA group. The significant effect of SAT in estimating percentage of grant aid indicates that grant aid was made available to the better students.

# Institution XXXIV

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The noteworthy effects at this institution were the increase in grant aid and decrease in loan and job aid as GPA and SAT increased. This is an indication that grant aid was used to recruit students with strong academic records.

### Institution XXXV

At this institution percentage of need met increased with SAT score (11% per \$100), decreased sharply with need (-12% per \$100), and percentage of grant aid increased with rank (11% per quartile). This pattern indicates that aid funds were used to recruit highly qualified students including the preferential availability of grant aid.

# 3. Institutional Changes in the CSS Computation of Parental and Student Contribution

One of the principal questions motivating the collection of data on individual students concerned institutional practice vis-a-vis the utilization of CSS need analysis. Specifically, to what extent and in what manner were institutions modifying CSS central computation? The data on individual students submitted by 35 institutions made possible some definitive answer to these questions.

Consideration was restricted to individuals who were accepted for admission and who filed a Parents' Confidential Statement. In this category, a total of 4,572 observations were obtained, for an average of 127 over the 35 institutions submitting individual data. In only two cases was the number of relevant questionnaires smaller than 50 (Institution X and Institution XXXV), and both of these institutions reported no moderication of the CSS need analysis.

Institutions were asked to report the CSS computation of the parents' contribution, applicants' summer earnings, and applicants' assets whenever the individual student being observed was accepted and had filed a Parents' Confidential Statement. They were also requested to indicate any modification of the CSS need analysis made by the institution. In Appendix M, the extent to which modifications were made is summarized for each of the 35 institutions. Table I reports changes in CSS computation of total family contribution, Table II pertains to parental contribution, Table III to applicants' assets. Institutions are grouped in these tables according to size (Large, Medium, or Small) and to control (Fublic or Private).



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A copy of the individual questionnaire may be found in Appendix E.

of modifications reported by the 35 institutions and does not give weight to larger schools or schools which submitted more questionnaires. CSS computation of total family contribution was adjusted upward in 37% of all cases for an average of \$202 and downward in 7% of all cases for an average of \$255. This means that in more than one out of three cases, institutes a saked for a family contribution larger than the CSS computation and that this increase averaged \$202, while in one case out of fourteen, the institution sought a smaller family contribution for an average of \$255.

With the exception of small public schools which were under represented, this result was not restricted to one type of school. Medium sized public schools reported the smallest number of modifications and large public schools made the greatest percentage of adjustments.

One factor can be immediately isolated as contributing to this high percentage of adjustments. Twelve institutions, a third of the respondents, reported that as a matter of course they increased the CSS computation of applicants' summer earnings. For example, Institution III increased the estimate of applicants' summer earnings by \$100 or \$200 in 99% of all cases. The greatest increase in this figure was reported by Institution XXVII, an average increase of \$320 over 86% of cases for that institution. These specific instances of general modification in the CSS formula accounted for two thirds of the reported upward adjustments in total family contribution.

<sup>1</sup> See Table III, Appendix M.

The number of downward adjustments reported for applicants' summer earnings was inconsequential.

The other principal area in which institutions modified CSS need analysis was that of parents' contribution. In 12% of all cases, parents' contribution was adjusted upward for an average of \$240 and in 8% of all cases, parents' contribution was adjusted downward for an average of \$324. Thirteen schools adjusted parents' contribution upward more than 10% of the time and ten of these schools were private. There was no apparent pattern in the average dollar amount of adjustments. Of the thirteen institutions modifying more than 15% of the CSS calculation of parents' contribution, six were among the twelve schools which also consistently adjusted applicants' summer earnings.

In the category of applicants' assets, only two schools, Institutions III and IX, reported a frequent change in the CSS computation, and on the average, institutions reported modifications of the CSS figures in only 6% of all cases. The data reported in Table IV for Institution XXIX, namely an upward adjustment of \$200 in 66% of cases, was explained by that institution as expected term-time earnings.

Returning to Table I in Appendix M, it is clear that the reported changes in the CSS estimate of total contribution have two principal sources, the twelve institutions at which the CSS estimate of summer earnings was considered too small, and the thirteen institutions which made a practice of modifying the CSS computation of parents' contribution.

It appears that most of the responding financial aid offices did not accept the CSS analysis of parents' contribution, and that most institutions reviewed the CSS computation of parents' contribution and, in one out of five

manner in which this question can be investigated further consists in direct inquiry with the 35 participating institutions concerning the method by which they compute the parents' contribution. The responses could suggest some modifications of he CSS formula. As to CSS treatment of applicants' summer earnings, many figurated aid officers obviously consider that the CSS estimate is unreasonably low.

In addition, to investigating the frequency and magnitude of modifications in CSS computed need at the 35 responding institutions, it has seemed useful also to examine how these changes have affected total need for the students in the sample. Once again utilizing the same size and control stratification of colleges and universities, it is possible to find the relationship between CSS total need and institutionally adjusted need.

In every case, the institutionally adjusted total need was at least 79% of the CSS figures. It is perhaps significant to note that in the 74% of the instances where changes did occur, the institutional modification turned out to produce total need of within 5% or less of CSS computed total need in 66% of the cases. It was within 10% or less in 76%. No discernable pattern of difference because of size or control was apparent.

# As has been noted, the purpose of the analysis of the individual student data was to characterize institutional admissions and financial aid policies

as revealed by the decisions actually made in admitting and awarding financial aid to 1969's freshman class. Of special interest to the Cartter Panel



See Appendix M for these results. Data for two institutions made it impossible to use their responses in this connection.

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was a determination of the exact degree of deviation of actual practice from CSS recommendations and then investigation of the causes of this deviation. In areas where CSS has not established any standards, actual practices are compared with the Cartter Panel's packaging subcommittee's recommendations.

The admission-aid process was considered in three categories, admission, determination of the size of the package for students who received aid, and determination of the grant component of the package. It was found that in about half the institutions, for non-minority students, large financial need significantly reduced their probability of acceptance even when quantifiable indicators of ability were used as controls. Secondly, it was found that in every institution, the higher the institutionally calculated financial need, the smaller the proportion of it that was covered by the total package of institutional and outside awards. Thirdly, it was discovered that while packaging practices varied considerably, high measured ability was very often associated with a higher grant component. High financial need was only weakly associated with a rise in the grant share of the package and was sometimes negatively associated with the grant share.

The admission decision was, as expected, dominated by the ability of the students, especially in those institutions which had non-homogeneous applicant pools. The explanation of many colleges' admissions policies was substantially improved by use of the Automatic Interaction Detector program which split the population into subgroups, based on ability measures, in such a way as to form groups whose members fared similarly in the admissions competition. The success of these splits supports the view that, in many cases, the admitting process can be best characterized as a ranking process with a cutoff point determined by the number of spaces available.

The surprising finding, however, was the consistently negative relationship between financial need and probability of being offered admission. Thirty-two out of thirty-five 3chools had negative coefficients on the financial need variable. In eighteen of those institutions, the coefficient was significant at the five percent level on a two-tailed test. In four more, it was significant at the five percent level on a one-tailed test. In the private institutions, the average effect of applying for aid and having need of \$1000 was to reduce probability of admission by eleven percent. In the public institutions in the study, the average effect of applying for aid and having need of \$1000 was to reduce probability of admission by seven percent. Because the typical amount of need in private colleges is larger, the impact of this effect is greater there. This result is especially significant considering that the statistical and sampling biases should work primarily the other way. If errors were made in sampling of aid applicants one would expect that the error would be in the direction of missing applicants who were not admitted. Secondly, since there is a widespread impression among the students that aid is primarily for those with exceptional records, students with positive characteristics such as musical, sports, or leadership ability not entered into the relationship should be more likely to apply for aid. The reduced probability of admission for the typical aid applicant is specified for each col. ge in Table II on page 48 (refer to the column entitled "Mean Need x Effect of Need").

It is often said in the popular press that because of the minority-disadvantaged recruitment programs, it is easier to get admitted to college now if one is poor. The race of the applicants was available for seven of the private colleges and in the six cases where being black improved the probability of admission (generally by about twenty-five percent), the

negative effect of extra financial need was strong and significant. The negative relationship was also significant, however, in many colleges that were admitting blacks but did not report which of their applicants were black. This directly refutes the popular impression that giving preference to blacks results in a net preference for low income students.

The results have two interpretations: that colleges are limiting the demand on their meager financial aid resources by not admitting needy students, or that financial need is a proxy for other characteristics such as lack of an alumni parent; being a public school graduate; or at public colleges, being an out-of-state resident, which are the real causes of the reduced probability of admission. Which ever interpretation is accepted, the effect is to make it more difficult for low income students to get a college education.

The major purpose of the CSS's need analysis system is to establish the size of the total package of financial aid. Knowledge of the extent to which colleges' actual awards vary from CSS norms is important to an evaluation of the success of the efforts of CSS to direct the nation's financial aid into the most productive service of students, institutions, and society. If these goals are to be reached, then an institution's aid resources must be utilized to the fullest extent by, (1) limiting awards to the amount of need, and (2) allocating awards in such a way as to permit as many students as possible to enroll.

The students most likely to be excluded from higher education by insufficient offers of aid are those with the greatest need. It is exactly these students, however, who seem to fare the worst as the system currently operates. The greater a student's need, the smaller the proportion of it

that was met by college and outside sources. In every college in the sample, the hypothesis that as need rose the aid offer rose at least proportionately was rejected at the .001 level. In the private colleges the proportion of financial need met fell by three percent for every \$100 of increased need. In the public colleges, the proportion of need met fell by eleven percent for every \$100 of extra need. On the average, evaluated at the mean financial need, the award rose fifty dollars for every hundred dollar increase in college defined need. The marginal rise in aid per hundred dollar increase in need evaluated at the college's mean need is presented in Column B of Table II on page 48.

The proportion of need met also had a tendency to vary with race and measured ability. In the private institutions, the proportion of need met was higher for blacks in six out of seven cases. In seven out of nineteen private colleges, improvements in measured ability were significantly associated with greater proportions of financial need being awarded. In three cases, one of the measures of ability had a significant negative association with award size. The relationship between ability and award size was more mixed in the public colleges than in the private.

The packaging decision was investigated by observing how the ratio of

$$\frac{\text{Aid}}{\text{Need}} = \frac{A}{N} = \mathbf{a} + b_1 N + b_2 \text{(ability)}$$

$$A = \mathbf{a}N + b_1 N^2 + b_2 N \text{(ability)}$$

$$\frac{b}{b} \frac{A}{N} = \mathbf{a} + 2b_1 N + b_2 \text{(ability)}$$
Since
$$\left(\frac{\overline{A}}{N}\right) = \mathbf{a} + b_1 \overline{N} + b_2 \overline{\text{(ability)}}$$

$$\frac{\lambda A}{\lambda N} = \frac{\overline{A}}{\overline{N}} + b_1 \overline{N}$$
 evaluated at the mean  $(\overline{N})$ 

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The partial of aid with respect to need can be obtained from the regression equation as follows:

grant aid to total aid varied with financial need, ability, and race. There are real constraints on the absolute amount of self-help borrowing and working students may be expected to be able to assume. In fact, students with great financial need often come from cultures where borrowing is associated with exploitive merchants. Loans are often unacceptable to them. For these and other reasons, the Cartter Panel's packaging subcommittee has suggested that all students applying for financial aid should be expected to either borrow or work to fill the first \$1000 or so of need, and that grant aid should be added to self help to fill the gap between self help and the remainder of unmet need. Thus, good practice implies that as need goes up, the grance proportion should rise substantially. In ten out of thirty-five colleges, there was a statistically significant tendency for the grant proportion to rise as need rose. In four colleges statistically significant tendencies in the opposite direction were observed. Though positive relationships of grant proportion to need predominated, the hypothesis of proportionality could not be rejected in the twenty-one remaining colleges. By combining the change in grant proportion with the relationship between total aid and institutionally calculated need, an estimate of the marginal tendency for grant aid to rise as need rises was calculated. This figure was below the

$$G = \frac{G}{A} \cdot A$$

$$\frac{\partial G}{\partial N} = \frac{\sqrt{\frac{G}{A}}}{\sqrt{\frac{G}{A}}} \cdot A + \frac{\partial A}{\partial A} \cdot \frac{G}{A}$$

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The change in grant per hundred dollars change in need is calculated in the following way:

 $<sup>\</sup>frac{G}{A}$  is the grant/(total aid) proportion.

 $<sup>\</sup>frac{\partial A}{\partial N}$  is the marginal effect of need on aid evaluated at the mean (Col. B).

 $<sup>\</sup>frac{\delta(G)}{A}$  is the coefficient on need in the equation predicting grant proportion.

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marginal increase rate for all aid in most cases! t not by much in at least half of the private colleges. This reflects both the heavy use of grant aid in these private colleges and adherence to the suggested packaging philosophy. The public colleges averaged a marginal rate of increase about one half of that for all aid as a whole. The estimate for each college is presented in Column C of Table II.

Ability is generally the most important predictor of the aid package. In eighteen of the colleges, greater measured ability was significantly associated with grants being a higher fraction of the total package. This fact reflects the common practice of using grant aid as a reward for past achievement. The packaging subcommittee recommends against raising the grant component of a financial aid package when a student has greater measured ability. On the contrary, the subcommittee points out that many academically marginal students may not be able to handle a job on top of their school work and recommends that the grant share be higher in these cases.

At each step of the admission-aid process, the non-minority high need student does not receive treatment up to the need level established by College Scholarship Service norms. This is quite understandable since the resources of colleges and universities are limited and two or three low need students can be aided, and most likely persuaded to attend, for the cost of one high need student. The increasing difficulty that many private colleges are having recruiting enough students willing and able to pay their high tuitions suggests that pressure from within the college to use aid as a recruitment device is not likely to end. But what is a good idea from the point of view of one college is counter-productive when all colleges engage in it.

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Given the counter pressures, the success CSS has had in leading colleges toward an aid policy which reflects student and national priorities is truly commendable. Further strengthened education and persuasion through professional organizations seems indicated, however, by the distance yet to go.

There are some possible interim approaches that could improve the effectiveness of the currently available financial aid resources. The first step is calculation by CSS of a suggested grant award size in addition to the calculation of overall financial aid. This in substance is being recommended by the packaging subcommittee. The second step is giving parents a copy of a modified version of the Financial Need Analysis Report. This was recommended in the study of Student Opinion. It would have to be explained to the parents on their modified FNAR that because of "recent cutbacks in Federal Funds" institutional financial aid budgets generally are inadequate and therefore the actual award is likely to be below the recommended amount. The first effect of this would be to create pressure for expansions of federal and state student aid programs. The second effect would be to encourage financial aid officers to adjust grants to favor the most needy students. Such an approach would make it difficult for institutions to sustain the observed practice of granting larger packages and larger grants when a student had a higher measured ability. It would be more difficult for aid officers to sustain the current practice of meeting a smaller proportion of calculated need when the need is larger. It would tend to reduce the use of financial aid awards as methods of competing for the limited supply of very able students.

TABLE II. INSTITUTIONAL STUDENT ANALYSIS SUMMARY

# **Colleges**

Need on   Probability   Mean Need   SAT   GFA   FIN, NEED   In Aid   per \$100	- WTAITE	Effect of PERCENTAGE OF NEED MET								
Probability of Admission   Xeffect   Coeffi-   Value   Coeffi-   Coeffi-								ETM MEED		- Change
of Admission (00°s) of Need cient of F cient of Cient of F cient			Mean Need				<u> </u>	FIN. D	IEED_	
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2007*** -167						.14857	1.25	03393	110	\$ 43
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4002 - 4702883 102 45 5006*** - 4706 45 6004** - 7707 1501391 26 83 703*** -41713681 5.205446 33 15 8001 - 2706 4.504712 97 15 901*** -14702220 38 72 10 NA03332 42 71 11004** - 7703332 42 71 11004** - 347 .06 4.503639 79 26 12(R)02*** -347 .06 4.501404 29 83 13(R)004*** - 87 .07 4.104117 63 16 14(R)002 - 37 .08 1901544 16 68 15007** -11704256 12 36 16(R)007*** -15704256 12 36 16(R)007*** -15701639 17 67 17(R)004*** - 6701639 17 67 18(R)004*** - 6702876 59 37 18(R)004*** - 6703738 19 12 Average007 -11703738 19 12 Average007 -11703738 19 12 24008* - 47 .NA02814 47 81 24008* - 47 .NA02814 31 43 25(R)002 - 17 .NA02814 31 43 26 0 0 NA02814 31 43 2701*** -77 .NA02814 31 43 2803*** -247 .NA09614 31 43 29006 - 67 .NA05755 22 57 2701*** -77 .NA03792 9.2 .05437 17 53 3202*** -167 .NA03792 9.2 .05437 17 53 3402*** -167 .NA037965 31 0 34(R) .002 - 2713549 26334(R) .002 - 2713549 26334(R) .002 - 2713549 26334(R) .00202				<b></b> 09176	20	.28814	6.2			
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	Average	011	- 7%					122707	71	

Legend: (R) race controlled for

NA information not available

--- insignificant result

\* result significant at .10 level

'\* result significant at .05 level

\*\*\* result significant at .01 level

SAT		PERCENTAGE OF GRANT GPA		FIN.	- Change in	
				- FIN	NBED	Grant Aid
Coeffi-	Value	Coeffi-	Value	Coeffi-	Value	per \$100 Increase
cient	of F	cient	of F	cient	of F	in Need
				.00182	1.2	\$ 36
				••••		40
				.01231	96	48
.02001	3.1					36
		.19107	5.7			12
						66
				.03204	52	55
.09089	25					14
.06090	8.0					32
.05061	8.8	.23541	9.2			29
				00921	48	6
.12212	12			.02213	20	76
.05945	11			.00863	7.6	70 29
				01185	14	38
.11624	20	.14510	5.4			32
						55
						27
		900		.01147	9.1	59
				.01137	17	28
				***************************************		\$ 37
NA.						
.w.		11010		.01736	13	<b>\$ 20</b>
'IA		.11013	4.3			24
w. 		+	13			11
NA.						24
NA		<b>+</b>	65	.01611	5.9	41
NA		+	173			21
NA		.31075	27			32
NA NA		.21556	23	.01125	6.7	13
				.02694	6.4	
NA.		+	146			28
NA NA						
NA NA		.14919	6.1	02183	15	19
NA .08843						
	4.9	***				
.07501	7.8	.21077	9.4			
		+	12			
					·	\$ 17

ERIC

### VI. Conclusions

As was anticipated when this study was undertaken, the collection and analysis of data concerning institutional financial aid practices has proved to be a formidable task. The project coordinator, with a decade of experience in the management of a large institutional financial aid program and considerable experience in the design and administration of state and federal aid programs, concludes the undertaking with a new appreciation of the difficulties.

With the exception of the Levine study of 1966 Parents Confidential Statement filers at institutions of higher learning in Washington State, there was no real prototype for a study of this nature, and in that study there was no attempt at an analysis of the data. This study establishes a frame of reference for the feasibil ty of large scale collections of aid and admissions data at a cross section of American universities. Substantial progress was also made in establishing the appropriateness and limitations of several analytical models for describing decision making in the aid and admissions offices.

The data collected from 86 institutions and 18,000 individual student observations were, as has been described, approached in a variety of ways. The tabular results are, ofcourse, both precise and useful. The tables obtained from the data collected through the institutional questionnaires reveal, at a highly representative sample of colleges and universities, the sources of student aid, the percentages of students seeking and securing aid, and the forms in which support was awarded. It should be recalled in weighing the significance of these results that the cooperating institutions



Richard S. Levine, <u>Proposed Post-Audit Services for CSS Member Colleges</u>. Educational Testing Service, Princeton, New Jersey, 1967.

during the year under examination enrolled ten percent of at the college students in the country and the aid resources reported amounted to ten percent of the total estimated for 1969-70. Secondly, from the individual questionnaires submitted by 35 institutions, it was possible to determine the extent to which CSS values for family contribution were being modified, the extent of financial need, the percentage of this need met, and the composition of aid packages at a representative sub-sample of the participating institutions.

Regression analysis was applied to the institutional data in an effort to describe certain variables, such as gift aid as a percentage of total aid, as a linear function of other, more easily obtained, institutional characteristics such as, for example, tuition. In general, the linear relationship was quite strong, explaining 50 to 75 percent of the variation of the dependent variable. These linear equations can be used either to predict the values of the dependent variables at institutions not in the survey or, by projecting the values of the independent variables, to predict future values of the dependent variables at the institutions studied. Further exploration for non-linear effects would undoubtedly improve to some extent the descriptive power of the equations.

The data from the individual questionnaires was also analyzed using a combination of linear regression and a grouping program called Automatic Interaction Detector (A.I.D.). The objective was to discover the extent to which a student's financial need, race, and academic attributes influenced the decisions on admission, percentage of need met, and composition of aid package. It was hoped that in some instances admissions and aid decisions would be explained, in the statistical sense, as functions of these few student attributes.



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In fact, the outcome of the analysis was that, at each institution, the important student attributes influencing a decision could be established and the order of magnitude of the relationship obtained, but the admissions and aid decision could not be completely described by the analysis. For example, at one institution, percentage of need met was estimated to decline 3% with every \$100 increase in financial need, white SAT score, GPA, and race were not significant determinants of the percentage of need met. At the same time, the linear model described only about one-third of the variation of the dependent variable, so that two-thirds of the variation remained undescribed. This suggests the complexity of the decision making process, as well as the importance of a variety of nonquantifiable, often subjective, student attributes.

The possibilities for analysis of the valuable individual data are by no means exhausted, and Professor Leonard Miller and other economists plan to continue working in this area. In particular, since the admissions measure is a binomial variable, there is a possibility for a second regression stage, using a correction for nonhomogeneity of variance, which will increase the descriptive power of the analysis. Also, the A.I.D. grouping program can be used much more extensively to identify boundary points in admissions and aid policies (e.g. all students with GPA greater than 3.0 are admitted). And Dr. Miller has proposed some stochastic equations which may have a higher descriptive power.

The study's results point to the particular need for continuing investigation of financial aid packaging and changes in CSS computed need. There was, it will be recalled, significant evidence of changes

being made in the area of applicants' summer carni. 3s and this could suggest the desirability of some modifications in existing CSS norms.

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If studies such as the one which is here being reported were to be conducted on a fairly regular basis, institutions would be encouraged to maintain their records in a way that the kind of data required for investigation would be more readily available. As was stated in the section describing data collection, record keeping in the areas of admissions and financial aid is in a highly underdeveloped state. As a consequence, institutions tended to complete questionnaires in a variety of ways, creating a certain amount of nonuniformity in the data. In a study of this kind, there is no such thing as too detailed instructions.

Related to the need for continuing CSS sponsored studies of financial aid practices and procedures, is the desirability for the organization to establish a systematized collection of studies, papers, and the like dealing with financial aid matters, which is accessible to institutions in their problem solving. Ideally, in order to insure maximum utilization by the membership, the most significant of this literature should be available in duplicated form in the regional offices of the College Entrance Examination Board rather than only at the CSS head-quarters in New York. Time and time again, the research team found itself in the position of suspecting that someone else had likely proceeded it in a particular area of investigation but unable to discover if such were the case and where to locate the results.

A good part of CSS's research in the past appears to have been related to rather specific problem solving situations. Such an approach, of course, does not serve continuously and systematically to push forward the body of knowledge about student financial aid. It would be of immense benefit, then

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if CSS, within its organizational structure, were to establish a standing committee on research. That body should meet regularly and encourage by means of grants or other funding arrangements the scholarly investigation of the major areas of concern.

Unquestionably, one of the most satisfying aspects of the project, at least for the director of the study, has been the opportunity to work rather closely with a number of dedicated college administrators, including principally financial aid officers and admissions directors, and to increase his appreciation of the way in which so many of them are struggling against rather discouraging odds to carry out their responsibilities. Most were found to have too small staffs, little access to automated information systems, and aid applications which far outnumbered available aid resources. It is hoped that this study will be of use to them in their efforts and, more importantly, will encourage similar undertakings on a more regular basis by the College Scholarship Service and other concerned agencies.

# STUDY OF COLLEGE ADMISSIONS AND FINANCIAL ALD POLICIES

AS REVEALED BY INSTITUTIONAL PRACTICES (Cartter Panel on Financial Aid)
Leonard Miller & Roy Radner

# Introduction I

Students can be described by a number of attributes: test results, past performance records, health status, region of residence, athletic ability, race, and financial need required for college attendance, to name a few. These characteristics represent the student when he, or she, applies for admission to, or continued financial support in an institution of higher education.

Not all applicants can be admitted and awarded all the financial need they require, for total enrollment within an institution is limited by the monetary resourcer the institution has available for financial aid purposes, and/or, the institution's definite notion of student capacity. Therefore, each institution must rank its applicants according to some explicit or implicit set of objectives. The resulting admission and aid policies are determined by this ranking.

The proposed study is concerned with the relationships between student attributes and financial aid practices. The purpose of the study is to investigate institutions' goals and their admission and financial aid policies, and revealed by the actions rather than just the policy statements of these institutions. Our goal is to understand these actions.

We propose to approach an understanding of these actions in two stages.

First, we shall study the relative importance of alternative student attributes, and the relative importance of institutional characteristics, while answering for the College Scholarship Service (CSS) some very basic questions about current financial aid practice and its efficacy.



The knowledge gained in this first stage will ·llow us to generate more complicated models of institution-admission behavior. These models, it is hoped, will yield more refined descriptions of institutional objectives and their student attribute trade-offs. Such descriptions would tell us the relative desire institutions have for students with particular attributes, and consequently the price, in the form of tuition minus student aid, these institutions are willing to be paid for granting attendance. This latter information will be extremely useful in predicting the characteristics of students who are likely to be admitted in different types of institutions under alternative federal aid programs.

What follows below is a more specific description of the two stages of planned research. Section II begins with some of the questions currently under CSS evaluation, and suggests statistical models for answering these questions. In the third section, one possible example of modeling higher education admission behavior is presented. The final section deals with the data necessary to carry out the proposed studies.

### StageI

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Student financial need is computed by the CSS formula. The purpose of the financial aid formula is to remove the financial barriers from a student's higher education attendance decision. The formula yields a required need, based on the difference between the school's costs and the financial standing of the student's family. The economic barrier is supposedly removed because in principle, institutions make admissions decisions independently of the student's financial requirements, and aid arrangements, in the form of grants, loans, and jobs, are to be provided by the institution to fill the financial gap. However, since higher education institutions have aid contraints, they can not in practice follow the hypothetical procedure described above.

We can begin to understand the admissions-aid recisions with the answers to the following questions:

- 1) To what extent is the admission to a higher education institution dependent on the calculated financial need?
- 2) To what extent are institutions meeting the CSS computed financial need? In what way and for what reasons are institutions changing the computed figure of financial need?
- 3) In what forms, combinations of loans, grants, and jobs, is the aid offered? How do these combinations differ by student attributes, family income, students' confidential record, predicted student performance minority group status, etc.? We would also like to know the effect of alternative aid decisions on the productivity of student training.
- 4) Is there any evidence on the efficacy (measured in terms of student performance, college completion time, completion probabilities, etc.) of different types of aid packages? Are there any recommendations for the restructuring of packaging?

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And finally, we would like to be able to predict how these admission aid decisions might change if sources of aid funds were to change over time.

5) Where are institutions getting their aid funds? What sources are likely to change in the next few years? How should packaging policies change as the availability of financial aid changes?

The remainder of this section consists of an outline of linear stochastic models which will, hopefully, bring us closer to the answers to the above questions.

For notational purposes, let:

equal accordingly as students are admitted to institution i; not admitted to institution i;

F equal the amount of CSS formula computed aid necessary for student s;

equal the money value of aid given to student s in institution i;

equal the computed deviation between F and M ;

equal the k-th attribute of student s. The attribute "student aid required" has been singled out above and given the separate notation F;

equals an error term. The subscript u will depend on the particular specification under study.

 $m{\beta}_{
m o}$  , and  $m{\beta}_{
m uv}$  represent theoretical coefficients requiring estimation; and represent their estimates.

### w.r.t. question 1

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To test the dependency of admission on the calculated need, the probability of admission must be made a function of student attributes, and the aid required. The linear stochastic model with dichotomous dependent variable, indicating admitted or not admitted, and independent variables representing students' attributes, and financial need would represent the desired probabilistic formulation. The observations would be all applicants an institution. The admission specification would be

(1) 
$$P_{\text{si}} = \beta_{\text{o}} + \sum_{k=1}^{K} \beta_{ki} A_{\text{ski}} + \beta_{\text{s}} F_{\text{s}} + \varepsilon_{\text{si}}$$

Least squares regression, coupled with a corrective procedure applied to the variance covariance matrix, necessitated by the effect of the dichotomous dependent variable on the error structure, would produce best linear unbiased estimates of the coefficients.

The meaning of each variable's coefficient under this specification is the change in probability of admission caused by a change in one unit of the coefficient's variable. A statistically significant estimate for swould indicate the change in probability of enrollment due to an additional dollar of computed need.

### w.r.t. question 2

T-special and

To test the extent to which financial need is being met and for what reasons the amount of aid varies, we need only make the amount of aid given a function of student attributes and financial need.

The following equivalent forms seem appropriate to this task:

(2) 
$$D_{si} = \beta_{oi} + \sum_{k=1}^{K} \beta_{ki} A_{ski} + \beta_{s} F_{s} + \xi_{si}$$
, or

(21) 
$$M_{si} = \beta_{oi} + \sum_{k=1}^{K} \beta_{ki} A_{ski} + (1+\beta_s) F_s + \varepsilon_{si}$$

If one actually expects the money value of an award to be independent of student attributes, all  $\beta$ 's estimated in either form of equation two should be not statistically different from zero. To the extent that awards are a function of student attributes, the attribute's coefficient will be statistically different from zero and the coefficient's magnitude will represent either the change in deviation from CSS computed need per unit change in attribute, or the change in money award per unit change in attribute, depending on whether equation (2) or (2') is estimated.

Observations would be all admitted students to an institution with computed need greater than zero.

# w.r.t. question 3

To test the dependency of aid forms, or "packaging", on student attributes, only a slightly more complicated model is required.

Let:

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y equal M /M : the proportion of grant aid awarded to gsi gsi si

student s in institution i;

y equal M /M: the proportion of job aid awarded to jsi jsi si

student s in institution i; and

y equal M /M: the proportion of loan aid awarded to Lsi Lsi si

student s in institution i.

Assume that these proportions can be explained by one student attribute A, and the explanation can be represented by a linear form. Then, for each institution:

(3a) 
$$y_{gs} = \beta_{og} + \beta_{1g}A_s + \epsilon_{gs}$$

(3b) 
$$y_{is} = \beta_{oj} + \beta_{ij} A_s + \epsilon_{js}$$

(3c) 
$$y_{Ls} = \beta_{oL} + \beta_{1L} A_s + \epsilon_{Ls}$$

We also know that the proportions add to unity,

$$(4) \sum_{m \text{ ms}} y = 1,$$

and that the sum of the change in proportions must therefore be zero,

$$\sum_{\mathbf{m}} \Delta y = 0.$$

The sum of the change in proportions is equal, by equations (3a) - (3c), to  $\sum_{m} \beta_{1m} \Delta A = 0.$  Therefore,

(5) 
$$\sum_{m} \beta_{1m} = 0$$
.

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Equations (6a) and (6b) which are estimatable forms of equations (3a) - (3c), incorporate the additional information contained in (4) and (5).

(6a) 1-y = 
$$(\beta_{0i} + \beta_{0L}) - \beta_{19} A_5$$
 ( $\xi_{15} + \xi_{L5}$ )

Equations (6a) and (6b) can be estimated by regression analysis. b and b are interpreted from equation (3a) and (3b) as the change in  $\lg - \lg - \lg$  proportion of aid in the forms of grants and jobs, respectively, for a unit change in student characteristic A. b is estimated directly from the estimates of  $\lg$  and  $\lg$ , and equation (5).

Equations (6a) and (6b) investigate packaging as a function of one student attribute. The generalization of the transformation of equations (3a) - (3c) into (6a) and (6b), when more than one student attribute is required to explain the observed packaging proportions, is straight forward.

W.r.t. question 4

Study of the effect of packaging on student performance requires analysis of information on students after they have been subject to the effect of a packaging policy. Therefore, data on students 4 or 5 years after freshman status and perhaps 2 years after freshman status will be necessary. Since packaging changes during the student's enrollment years, analysing the results at two points in the flow through school would help us understand the dynamic effects of packaging.

The dependent variable would represent some efficiency measure, such as years of school completed, or units of school completed, grade point average, or graduate school attendance. The independent variables would represent the student's attributes and the proportions of an aid packaging unit. According to the dependent variable chosen, the coefficient on the packaging form's proportion of aid would have the interpretation of additional units completed,



(ASSA)

or change in grade point average, or change in probability of graduate school attendance per percentage change in aid form under investigation.

w.r.t. question 5

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To test how packaging policies are likely to change as sources of aid change, we should pool students from several institutions and make proportions of aid a function of student attributes and institutional aid source characteristics. The coefficients on aid sources might indicate how the pool of institutions would change puckaging as the source of aid changed. Which institutions should be pooled is an interesting experimental question. Control and level parameters are the usual criteria. And, they are likely to be the relevant ones for public policy purposes. But, I suspect that institutions which have similar aid practices, either measured by the coefficient estimates in equation (2) or the coefficient estimates in equations (6a) and (6b), would be a better criterion for institution aggregation.

### Stage Two

We shall be concerned in this section with an institution of higher education that is attempting to maximize its own welfare function. The arguments of this function are the students it can enroll, Q. We assume that the institution collects sufficient data on applicants' attributes to be able to differentiate them into homogeneous groups, a, and that the institution can price discriminate, charging different prices, P(a), to different prospective students, Q(a). The institution is somewhat constrained in its behavior, however, as:

- i) It has a definite notion of capacity, C. The sum of enrollments must not exceed this capacity;
- ii) It operates under financial constraints. The sum of tuition charges must be at least equal to a required revenue, R; and
- iii) It is limited in whom it can enroll by the demand of the students. This student demand is a function of the students' attributes, and the price of attending the institution.

This process can be represented by the following maximization problem:

MAXIMIZE (U)(Q)(a) over Q(a), P(a)

SUBJECT TO

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- (1)  $\sum_{\mathbf{a}} Q(\mathbf{a}) \leq c$
- (2)  $\sum_{a} P(a)Q(a) \geq R$
- (3)  $Q(a) \le D[P(a),a]$  for all a, and
- (4) Q(a),P(a)>0, for all a.

Forming the Legrangian, where  $\gamma_i > 1$  (a) are the Legrangian multipliers on capacity, revenue, and demand, respectively,

$$\mathcal{L} = U(Q(a)) - \gamma \left[ \sum_{a} Q(a) - C \right] + \rho \left[ \sum_{a} P(a)Q(a) - R \right] - \sum_{a} \int_{A} (a) \left[ Q(a) - D[P(u), a] \right]$$

Differentiating this Legrangian over the operant variables, Q(a), and P(a), yields the first order conditions for maximization.

$$\frac{2\chi}{2Q(a)} = \frac{2U(Q(a))}{2Q(a)} + P(a) - 8 - S(a) \le 0, \text{ for each a}$$

(6) 
$$\frac{\partial \mathcal{X}}{\partial P(a)} = \int (a) D' [P(a), a] + P Q(a) \leq 0$$
, for each a.

As an example of the potential of such a model we shall explore one of its cases.

Assume that the revenue constraint is binding, Q > Q, that demand is greater than zero, D[P(a),a] > Q, that the demand curve is downward slowing with respect to price,  $D^{\dagger}[P(a),a] < Q$ , and that the institution has increasing marginal utility for all student types, but this utility increases at a diminishing rate,  $U^{\dagger}a > Q$ , and  $U^{\dagger}a < Q$ , for all a.

Theorem Either no members of a group are enrolled, or all members of a group are enrolled. If no members are enrolled the space is considered more valuable than the marginal utility to the institution of enrolling the group plus all the utility the group's revenue would bring in. If all members of the group are enrolled, then the space is more valuable than the marginal utility of an additional member to the group plus the utility his tuition would add to the institution, minus all the welfare which would be lost by creating the demand for this additional member.



Which is to say, either Q(a) = 0, and  $Q(a) \neq Q(a) \neq Q(a) \neq Q(a) \neq Q(a) = 0$  [P(a),a], and  $Q(a) \neq Q(a) \neq Q(a)$ 

If Q(a) = D[P(a),a], then by (6),  $S(a) \ge Q(a)/-D^{\dagger}[P(a),a], \text{ which is greater than zero.} \quad (D^{\dagger}[P(a),a])$  has been assumed to be negative). Thus S(a) > 0. If S(a) = 0, from  $(5) \times U^{\dagger}a(Q) + QP(a) \ge U^{\dagger}a(Q) > 0$ . If S(a) > 0, from  $(5) \times U^{\dagger}a(Q) + QP(a) - S(a)$ .

In addition to illuminating the general admission-pricing decision framework, extensions of this analysis can yield estimates for the welfare functions of individual schools and the student demand functions for these institutions as well.

One further comment should be made on the research nexus between the methodology of stage I and the methodology of stage II.

In stage II, the institution is seen to group students according to their attributes into homogeneous collections, and to then have similar policies towards the members of a group. In Stage I, the analysis sought to discover the relations between marginal changes in student attributes and institution behavior.

If the methodology of stage I is successful, important attributes will have been discovered. The difficulty of the job of constructing homogeneous student groups for step II will have been greatly diminished. If, however,



the first stage is not successful, the methodology of the second stage suggests groups be found on the basis of similar instit. Fional action. The method of discriminate analysis might be employed in this case.

November 7, 1969

Dr. Martha E. Peterson
President
Barnard College
606 West 120th Street
New York, New York 10027

Bear President Peterson:

I accepted the chairmanship of a Panel this year which has been charged by the College Scholarship Service of the College Entrance Examination Board with the responsibility of examining the rationale and procedures used by the Service in assessing student need for financial aid. CSS procedures are now used in about two thirds of all financial aid decisions in the country, and our Panel's effort is the first searching review of the system since its initiation in 1954.

student constituency and the institution's role in society. Our traditional financial aid philosophy and procedures, which have served us so well over the last fifteen years, may be quite inadequate for the 1970's. We are, therefore, seeking your help in our investigation of institutional goals and policies with respect to admissions and aid, as revealed by actions and not simply through policy statements. The study should provide the Panel with essential information on the extent to which colleges are meeting computed financial needs and the manner in which they are 'packaging' the various types of student support.

A second phase of the study would be to forecast the impact of different potential federal and state aid programs on enrollments. We believe we could perform a useful service in this regard as the Federal Government enters a period of reassessment of its role in supporting higher education.

As the first step in the study, I hope that your institution will share with us some data on your undergraduate applicants, current enrollment and student aid resources. We are asking you to send us this information on the institutional questionnaire enclosed (a second copy of which is for your retention). We are also asking you to review a freshman questionnaire which will be used to gather data on a sample of individuals at about forty selected institutions, and let us know how much of this information is available in some automated form.



Dr. Robert P. Huff, Director of Financial Aid at Stanford University, has agreed to direct the study under the guidance of the Panel's Research Committee. I hope that you will return one copy of each of the two completed questionnaires to him in the envelope which is enclosed. I trust also that you will agree and so indicate on the institutional questionnaire your willingness to provide us with information on a sample of your freshman applicants for admission in the fall of 1969.

I want to apologize in advance for the time and a fort we request of your staff. I trust you will agree, however, that without the availability of data of this kind, it is virtually impossible to improve our techniques of administering student support programs. Apart from the major goals of improving institutional and CSS procedures, we think that we can generate information which can be valuable for your own institution's program. We will share with participating colleges comparisons with avarages for similar types of institutions in the extent of meeting student needs.

If you have questions about the study in general or about the two questionnaires in particular, please do not hesitate to call Area Code 415 321-2300 or write Robert Huff at Stanford. He is prepared to work with your staff in facilitating the gathering of institutional and individual data which we seek.

Let me thank you for considering this plea for help and urge you to participate in our study.

Sincercly,

Allan M. Cartter

AMC/lp Enclosures

### INSTITUTIONS INVITED TO PARTICIPATE

#### IN THE STUDY

Name

City, State

Classification
Region, Size, Control

Aquinas College Grand Rapids, Michigan Augsberg College Minneapolis, Minnesota Barnard College New York, New York Boston College Chestnut Hill, Massachusetts Boston University Boston, Massachusetts Bowdoin College Brunswick, Maine Bryn Mawr College Bryn Mawr, Pennsylvania University of California, Berkeley Berkeley, California University of California, Los Angeles Los Angeles, California California Institute of Technology Pasadena, California Case Western Reserve University Cleveland, thio Cazenovia Junior College Cazenovia, New York Cheyney State College Cheyney, Pennsylvania Chicago State College Chicago, Illinois Claremont Men's College Claremont, California Colorado State University Fort Collins, Colorado Community College of Philadelphia Philadelphia, Pennsylvania Concordia College Moorhead, Minnesota Dartmouth College Hanover, New Hampshire Dominican College of San Rafael San Rafael, California East Los Angeles College Los Angeles, California Elizabeth City State College Elizabeth City, North Carolina Everett Community College

Everett, Washington

Mid-West, Medium, Private Mid-West, Medium, Private East, Medium, Private East, Large, Private East, Large, Private East, Small, Private East, Small, Private West, Large, Public West, Large, Public West, Small, Private Mid-West, Large, Private East, Junior College, Private East, Small, Public Mid-West, Small, Public West, Small, Private West, Large, Public East, Junior College, Public Mid-West, Medium, Private East, Medium, Private West, Small, Private West, Junior College, Public

South, Small, Public

West, Junior College, Public

Name

City, State

Classification Region, Size, Control

Federal City College Washington, D. C. Fisk University Nashville, Tennessee Fort Valley State College Fort Valley, Georgia Georgia Institute of Technology Atlanta, Georgia Gonzaga University Spokane, Washington Grand Rapids Junior College Grand Rapids, Michigan Hamline University St. Paul, Minnesota Hampton Institute Hampton, Virginia Harvard University Cambridge, Massachusetts Harvey Mudd College Claremont, California University of Hawaii Honolulu, Hawaii California State College at Hayward Hayward, California Indiana University Bloomington, Indiana University of Kentucky Lexington, Kentucky Knoxville College Knoxville, Tennessee Laney College Oakland, California Lewis and Clark College Portland, Oregon Lincoln University Lincoln University, Pennsylvania Long Island University Brooklyn, New York Loretto Heights College Denver, Colorado Massachusetts institute of Technology Cambridge, Massachusetts University of Massachusetts Amherst, Massachusetts Massachusetts State Colleges Bridgewater State College

Bridgewater, Massachusetts

East, Small, Public South, Medium, Private South, Small, Public South, Medium, Public West, Medium, Private Mid-West, Junior College, Public Mid-West, Medium, Private South, Medium, Private East, Large, Private West, Small, Private West, Medium, Public West, Medium, Public Mid-West, Large, Public South, Medium, Public South, Small, Private West, Junior College, Public West, Medium, Private East, Medium, Private

East, Large, Private
West, Small, Private
East, Large, Private
East, Large, Public
East, Small, Public

4

City, State

Classification Region, Size, Control

Massachusetts State Colleges cont. Fitchburg State College Fitchburg, Massachusetts Framingham State College Framingham, Massachusetts Lowell State College Lowell, Massachusetts North Adams State College North Adams, Massachusetts Salem State College Salem, Massachusetts Westfield State College Westfield, Massachusetts University of Michigan Ann Arbor, Michigan Millsaps College Jackson, Mississippi University of Mississippi University, Mississippi University of Southern Mississippi Hattiesburg, Mississippi University of Missouri Colombia, Missouri Montana State University Bozeman, Montana Western Montana College Cillon, Montana Morehead State University Morehead, Kentucky Mount Holyoke College South Hadley, Massachusetts College of Mount Saint Vincent Riverdale, New York Nassau Community College Garden City, New York Nazareth College of Kentucky Nazareth, Kentucky University of New Mexico Albuquerque, New Mexico Newark College of Engineering Newark, New Jersey New York State Colleges State University of New York at Brockport State University of New York at Cortland State University of New York at New Paltz

East, Small, Public East, Small, Public East, Small, Public East, Small, Public East, Medium, Public East, Small, Public Mid-West, Large, Public South, Small, Private South, Medium, Public South, Medium, Public Mid-West, Medium, Public West, Medium, Public West, Small, Public South, Medium, Public East, Medium, Private East, Medium, Private East, Junior College, Public South, Small, Private Southwest, Medium, Public East, Medium, Public East, Small, Public

East, Small, Public

East, Small, Public

Classification
Region, Size, Control

New York State Colleges cont. State University of New York at Oneonta New York University New York, New York Northeastern University Boston, Massachusetts College of Notre Dame Belmont, California University of North Carolina Chapel Hill, North Caroline North Dakota State University Fargo, North Dakota North Texas State University Denton, Texas Occidental College Los Angeles, California Ohio State University Columbus, Ohio Ohio University Athens, Ohio University of Oklahoma Norman, Oklahoma Oregon State University Corvallis, Oregon University of Oregon Eugene, Oregon Pembroke State College Pembroke, North Carolina Philander Smith College Little Rock, Arkansas Pitzer College Claremont, California Pomona College Claremont, California Radcliffe College Cambridge, Massachusetts Rice University Houston, Texas Rutgers - The State University New Brunswick, New Jersey College of Saint Benedict St. Joseph, Minnesota Saint Mary's University San Antonio, Texas San Jose State College

San Jose, California

East, Small, Public East, Large, Private East, Large, Private West, Small, Private South, Medium, Public Mid-West, Medium, Public Southwest, Large, Public West, Medium, Private Mid-West, Large, Public Mid-West, Large, Public Southwest, Large, Public West, Large, Public West, Medium, Public South, Small, Public South, Small, Private West, Small, Private West, Medium, Private East, Medium, Private Southwest, Medium, Private East, Medium, Public Mid-West, Small, Private Southwest, Medium, Private West, Large, Public

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Name

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City, State

Classification
Region, Size, Control

University of Santa Clara Santa Clara, California Savannah State College Savannah, Georgia Scripps College Claremont, California Seattle University Seattle, Washington Seton Hall University South Orange, New Jersey Shippensburg State College Shippensburg, Pennsylvania Smith College Northampton, Massachusetts Southeast Missouri State College Cape Girardeau, Missouri Southern Connecticut State College New Haven, Connecticut Stanford University Stanford, California Stanislaus State College Turlock, California Tarleton State College Stephenville, Texas University of Tennessee Knoxville, Tennessee Texas Agricultural and Industrial University Kingsville, Texas University of Texas Austin, Texas Tougaloo College Tougaloo, Mississippi Trenton State College Trenton, New Jersey Tri-State College Angola, Indiana Tulane University New Orleans, Louisiana Tuskegee Institute Tuskegee, Alabama Umpqua Community College Roseburg, Oregon Valdosta State College Valdosta, Georgia Vassar College

Poughkeepsie, New York

West, Medium, Private

South, Small, Public

West, Small, Private

West, Medium, Private

East, Large, Private

East, Small, Public

East, Medium, Private

Mid-West, Medium, Public

East, Medium, Public

West, Large, Private

West, Small, Public

Southwest, Small, Public

South, Large, Public

Southwest, Medium, Public

Southwest, Large, Public

South, Small, Private

East, Medium, Public

Mid-West, Medium, Private

South, Large, Private

South, Medium, Private

West, Junior College, Public

South, Small, Public

East, Medium, Private

Ci\_y, State

Classification
Region, Size, Control

Washington University Saint Louis, Missouri University of Washington Seattle, Washington Wayne State University Detroit, Michigan Wellesley College Wellesley, Massachusetts West Texas State University Canyon, Texas Whitman College Walla Walla, Washington Wilberforce University. Wilberforce, Ohio Winston-Salem State College Winston-Salem, North Carolina Wisconsin State Universities Wisconsin State University at Oshkosh Wisconsin State University at Stevens Point Wisconsin State University at Superior Wisconsin State University at Whitewater University of Wisconsin Madison, Wisconsin University of Wyoming Laramie, Wyoming Yale University New Haven, Connecticut

Mid-West, Large, Private
West, Large, Public
Mid-West, Large, Public
East, Medium, Private
Southwest, Medium, Public
West, Medium, Private
Mid-West, Medium, Private
South, Small, Public
Mid-West, Medium, Public
Mid-West, Medium, Public
Mid-West, Medium, Public
Mid-West, Medium, Public

West, Medium, Public
East, Large, Private

Mid-West, Medium, Public

Mid-West, Large, Public

## COLLEGE SCHOLARSHIP SERVICE

## STUDY OF INSTITUTIONAL FINANCIAL AID PRACTICES

## INSTITUTIONAL QUESTIONNAIRE

<u>A.</u>	Pre	-enrollment Data (Autumn 1	969)	
	1.	Number of applicants for	acmission (Autumn 1969)	
		<ul> <li>a. Freshmen men</li> <li>b. Freshmen women</li> <li>c. Transfer men</li> <li>d. Transfer women</li> <li>e. Total men</li> <li>f. Total women</li> </ul>		
	2.	Number of applicants for	aid (Autumn 1969)	
		<ul> <li>a. Freshmen men</li> <li>b. Freshmen women</li> <li>c. Transfer men</li> <li>d. Transfer women</li> <li>e. Total men</li> <li>f. Total women</li> </ul>		,
R	Enro	11ment Data (Autumn 1969)	P. 4.	
	1.	Undergraduate men	Full-time	Part-time
	2.	Undergraduate women		
	3.	Freshmen men		
	4.	Freshmen women		
	5.	Transfer men		
	6.	Transfer women		
<u>c.</u>	Poss	ible Unused Student Capaci	ty	,
		Check any of the following	c categories in which you co your existing faculty reson	ould have enrolled more
	2.	a. Undergraduate men b. Undergraduate women c. Freshmen men d. Freshmen women c. Transfer men f. Transfer women lf you could have eprolled	Pore students as noted in	Part-time
		of the Tollowing reasons please rank in importance.	DICVEDITED VOU From doing co	" (If more than one reason,
		<ul> <li>a. Insufficient financia</li> <li>b. Insufficient number of</li> <li>c. Unanticipated enrollm</li> <li>admissions application</li> </ul>	f applicants ent drop due to withdrawn	

	.*.	1. we have that have enrepresented you from doing	colled more studen so? (If more that	nts, which of un one, indica	the fo	ollowing reasons I rank.)
1		<ul> <li>a. Instructional physic</li> <li>b. Residence facilities</li> <li>c. Teaching staff</li> <li>d. Other (specify)</li> </ul>	al facilities			
D.	If	your institution is public,	complete this se	ction (Autum	1969)	
-	1.	Undergraduate men	<u>In-State</u>		Out-of	-State
	2.	Undergraduate women				
	3.	Transfer mon				
	4.	Transfer women				
	5.	Freshmen men				
	6.	Freshmen women		•		
<u>E.</u>	Fst	mated total tuition and/or sived, 1969-70, from undergr	required fee inco	ome to be		
F.	Stud	lent budgets used in undergr	raduate need asses	sment (1969-	70)	
	1.	Tuition and fees Additional out-of-state and/or out-of-district charges where applicable	Resident	Commuter		Married
	3. 4.	Room & board Books & supplies				
-	5. 6.	Personal expenses Travel				
	7.	Other (specify)				
		TOTAL				
G.	Inst	itutionally-provided Aid Re	sources (1969-70)	excluding H	l below	
	1.		Number of students	now estimate to be expend	d	Dollar amount originally budgeted
		<ul><li>a. Freshmen</li><li>b. Transfers</li><li>c. All other undergraduates</li></ul>			- -	
	2.	Grants-in-Aid for Service (i.e. athletic grants, band scholarships)	I		-	
		a. Freshmen b. Transfers c. All other under-			 	

***	3	. Loun Funds (requiring reparter graduation)	Number of students payment	Dollar amount now estimated to be expended	Dollar amount originally budgeted
	4.	<ul> <li>a. Freshmen</li> <li>b. Transfers</li> <li>c. All other undergraduates</li> <li>Dollar Value of Jobs</li> </ul>			
	•	<ul> <li>a. Freshmen</li> <li>b. Transfers</li> <li>c. All other undergraduates</li> </ul>			
н.	Est	imate of Outside Aid Resou	rces (1969-70)		
	1.			Number of Students	Dollar Amount
		<ul><li>a. Freshmen</li><li>b. Transfers</li><li>c. All other undergradus</li></ul>			781104111
, 1	2.	NDEA Title II funds availa	able		
·		<ul><li>a. Freshmen</li><li>b. Transfers</li><li>c. All other undergradua</li></ul>	ites		
	3.	College Work-Study funds			
		<ul><li>a. Freshmen</li><li>b. Transfers</li><li>c. All other undergradua</li></ul>	tes		
	4.	Guaranteed loans (includin Loans and direct Federal L if not available	g State Guarantee oans)estimate,	d	
		<ul><li>a. Freshmen</li><li>b. Transfers</li><li>c. All other undergradua</li></ul>	tes		
	5.	State Scholarship Funds		•	
		<ul><li>a. Freshmen</li><li>b. Transfers</li><li>c. All other undergraduat</li></ul>	tes		
.1	Indi insi	cr ; which of the following itutional aid offers (check	one).		sions on
	1.		whether gift aid is offered	Amount of gift aid	Extent of loan and/or job aid

in individual questionnaire. (The number required for a valid sample will depend on the size of your applicant pool and can be discussed with the Research Director.)

	Sample size	_
Name of Official Responding		
Title		
Institution		

## OT JEY OF INSTITUTIONAL FINANCIAL AID PRACTICES Cartter Panel

MAT	TINANCIAL	ATD	PRACTICES			_
tter	Pane 1			CC	LEAVE	E
				1	 	-

QUESTIONNAIRE	ON	INDIVID	JAL FI	RESI	IMA N	APPLIC	CANI
(Provide	info	rmation	only	28	avai	lable	)

CC	LEAVE BLANK	
1		(1-6)

	ST) (NIPOLE)	SOCIAL		
ME ADDRESS		SECURITY		
IL ADDRESS		BIRTHDAT		Male Female
		LEAVE	AA RE N	- Tella le
CE T		BLANK		
,E	RELIGION		PROSPECTIVE MAJOR	
75 4				
Il institution is pr	ublic, please in	dicate if st	udent is consid	ered:
•	In-state a	nd/or in-dis	trict 🔲 Neit	her
SAT scores:	Math			
•		_	Verbal	
College Board Achiev	vement Tests ( <u>on</u>	ly if require	ed for admission	a):
NAME OF TEST			SCORE	LEAVE BLANK
	•		20011	LEAVE BLANK
		<del></del> ·		<del></del>
				·
	7. <u>2 </u>			
Did student [ile PCS	: 7		1	1
			L Yes	L No
Other colleges to wh	ich PCS sent: _			
•				•
	1	_		
Secondary School Date	a:	blic Dr	\dagger_1 \bigcit_0	<b>.</b>
Secondary School Date				ther private school
Please include any of	f GP	blic Pa		ther private school
	f GP	A		• • • • • • • • • • • • • • • • • • • •
Please include any of the following which is	f GP is	A	• • • • • • • • • • • • • • • • • • • •	
Please include any of the following which is	f GP is	A	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •
Please include any of the following which is	f GP is Ra	A	· · · · · · · · · · · · · · · · · · ·	• • • • • • • • • • • • • • • • • • • •
Please include any of the following which is available:	f GP is Ra C1 or Pe	A	· · · · · · · · · · · · · · · · · · ·	• • • • • • • • • • • • • • • • • • • •
Please include any of the following which is available:	f GP is Ra C1 or Pe	A	· · · · · · · · · · · · · · · · · · ·	• • • • • • • • • • • • • • • • • • • •
Please include any of the following which is available:  Other test sco	f GP is Ra C1 or Pe ores:	nk in class.	class	
Please include any of the following which is available:	f GP is Ra C1 or Pe ores:	nk in class.	· · · · · · · · · · · · · · · · · · ·	• • • • • • • • • • • • • • • • • • • •

,	7. Check all that apply:	Use 1 if applical Use 2 if not appl Use 3 if not avai Use 4 if not know	licable Llable for th	is study titution	
	(32) Alumni parents		(39)	Art competition award	
	(33) Attendance of •	iblings	(40)	Editor of school paper	
	(34) High-ranking el student body or	ected officer ir ganization	(41)	Original writing published	i
	(35) High-ranking in	state music conte	est (42)	NSF summer program	
	(36) Public speaking	award	(43) 🔲 8	itate or regional science	award
•	(37) Major role in p	lay		cholastic honor society	
	(38) Versity letter		—	lational Merit recognition	
	8. Admissions decisions:	Applicati Withdraw		cation of Other	(46)
	9. Currently enrolled? 10. Enrollment status:		Yes	No No	(47)
	Full time	3/4 time	1/2 +ime	4	
			1/2 * 1me	1/4 time	(48)
	FINANCIAL AID DATA (Comple	te if applicant wa	s accepted,		
	FINANCIAL AID DATA (Comple	te if applicant wa eck all that apply	es accepted, o	even if he did not enroll)	
	FINANCIAL AID DATA (Comple  1. Financial aid was (ch  (49)  Offered - need	te if applicant wa eck all that apply a factor (53)	Denied	even if he did not enroll)  - academic	
	FINANCIAL AID DATA (Comple 11. Financial aid was (ch (49)  Offered - need	te if applicant was eck all that apply a factor (53) not a factor (54)	Denied	even if he did not enroll)  - academic - other	
	EINANCIAL AID DATA (Comple 11. Financial aid was (ch (49)  Offered - need (50)  Offered - need (50)	te if applicant was eck all that apply a factor (53) not a factor (54)	Denied  A Receive	even if he did not enroll)  - academic	

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3.	Employment (dollars/year)		
	t .	<u>Offered</u>	Aid in effect if different from other
	Institutional term-time employment	\$(47-50)	•
	No. of work hrs/week	Hrs. (51-52)	\$ (7-10)
	Institutional summer employment	\$(53-56)	\$(13-16)
	College Work-Study term- time employment	\$(57-60)	\$(17-20)
	No. of work hrs/week	Hrs. (61-62)	Hrs. (21-22)
	College Work-Study summer employment	\$(63-66)	\$ (23-26)
٠	Other	\$(67-70)	\$(27-30)
4.	Other Benefits	Aid in Effect	
	G. I. Bill	\$	(31-34)
	Social Security	\$	(35-38)
	War Orphans Benefits	. \$	(39-42)
	Other (specify)	\$	(43-46)

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12. Budget used: Resident	<u>.</u>	٠.	<u>ئ</u> ــ	
Resident	Commuter	Out-of-S	tate Married	<b>(</b> 58)
13. CSS need analysis accepted	Yes	Ó	No	(59)
(Yearly amounts to	CSS Computation		Institutionally Adju	sted Amount
nearest dollar) Parents contribution	\$	(60-64)	\$	
Applicant's summer earnings	\$	(65-68)	\$	_ (17-20)
Applicant's assets	\$	(69-73)	\$	_
Allowance added for travel or other expenses	\$	(74-77)	\$	_ <b>(</b> 26-29)
Other (specify)	\$	<b>(7-11)</b>	\$	_ (30-34)
Nature and amount of aid offer	red and in effect:			
1. Gift Aid:	Offered		Aid in effect if different from off	
Institutional	\$	(35-38)	\$	(7-10)
EOG .	· \$	(39-42)	\$	(11-14)
Service Grant-in-Aid	\$	(43-46)	\$	(15-18)
State Grant	\$	(47 - 50)	\$	(19-22)
State Scholarship	\$	(51-54)	\$	(23-26)
Outside Scholarship	\$	(55-58)	\$	(27-30)
2. Loan:			•	
Institutional	\$	(59-62)	\$	(31-34)
National Defense	\$	(63-66)	\$	(35-38)
Guaranteed	\$	(67-7C)	\$	(39-42)
0ther	\$	(71-74)	ė	419 165

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SUMMARY BY TYPE OF THE COLLEGES AND UNIVERSITIES INVITED TO PARTICIPATE IN THE STUDY

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Institutional						
Type	West	Southwest	Midwest	South	East	Total
Large 4- Year Public	9	3	9	1	1	17
Medium 4- Year Public	S	3 14	7	9	8	26
Small 4- Year Public	2	1	1	•	13 24	23
Large 4- Year Private	1	0	2	1	9 18	13
Medium 4- Year Private	7	2	6 1A	3	14 9 18	27
Small 4- Year Private	8 1B	0	1 1C	5 34	2 1B	16
2-Year Public	4 2A	. 0	1	0	2	7
2-Year Private	0	0	0	0	1 10	1
Total	33	6	24	22	42	130

College with predominantly minority enrollment - 17
Private men's college - 5
Private women's college - 13 **4 m** U

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SUPMARY BY TYPE OF THE COLLEGES AND UNIVERSITIES RETURNING INSTITUTIONAL QUESTIONNAIRES

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Institutional Type	West	Southwest	Micwest	South	East	Total
Large 4- Year Public	5	٣	4	0	0	12
Medium 4- Year Public	2	3 1A	S	2	4	16
Smell 4- Year Public	7	1	0	41 4	S	12
Large 4- Year Private	1	0	2	1	7	11
Medium 4- Year Private	2	7	5	1	6 1B	19
Small 4- Year Private	8 2B	0	0	3 24	2 1B	13
2-Year Public	0	0	1	0	1	2
2-Year Private	0	0	0	0	-	1
Total	23	9	17	11	26	98
			<b>†</b>			

College with predominant minority enrollment - 6 Private men's college - 5 Private women's college - 9

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SUPPLARY OF INDIVIDUAL QUESTIONNAIRES RETURNED BY TYPE OF COLLEGE AND UNIVERSITY

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Took							
Type	West	Southwest	Midwest	South	East	Total	
Large 4- Year Public	(2)	(2)	(1)	0	0	(5)	1_
Medium 4- Year Public	(2)	(2) (2) 497 1A	1482	(1)	0	(10)	7
Small 4- Year Public	0	0	0	537 (2)	250 (1)	787	<del></del>
Large 4- Year Private	(1)	0	(1)	(1)	(2)	(5)	
Medium 4- Year Private	1608	(1)	(3)	0	(1)	(9)	
Small 4- Year Private	(2) 682 1B 1C	0	0	(1)	(2) 1212 1B	(5)	
2-Year Public	0	0	0	0	0	0	
2-Year Private	0	0	0	0	0	0	
Total	5959 (11)	2635 (5)	3294 (10)	1422 (5)	3440 (6)	16850 (37)	

Numbers in parentheses are a count of institutions returning individual questionnaires.

College with predominantly minority enrollment - 4
Private men's college - 2
Private women's college - 3

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AGGRECATE DATA BY INDIVIDUALS FOR COLLEGES AND UNIVERSITIES RETURNING THE INSTITUTIONAL QUESTIONNAIRE

Number of Schools -- 86

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	Number of Applicants for Admission	Number of Applicants for Aid	Enrollment Data
Freshmen Men	183,293	62.026	721 76
Freshmen Women	129,803	191 07	60,107
Transfer Men	44,734	761 8	38,175
Transfer Women	37,238	401.0	20,391
Undergraduate Men	228,027	2010	16,080
Undergraduate Women	167,041	012.07	301,664
TOTAL	395,068	750104	212,358
		116,732	514,022
	-		

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APPENDIX I - Part 2
AGGRECATE DATA BY DOLLARS FOR COLLEGES AND UNIVERSITIES
RETURNING THE INSTITUTIONAL QUESTIONNAIRE

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11			!	!							1					Appendix I - Part 2
	TOTAL	103 767 77	1020 020	0 340 707	707,000,70	24,399,410		15 381 37.7	, 10, 100, CC	779,300,67	16,369,521	39,500,28	12,072,582		193, 684, 870	149,150
	Other Undergraduates	29, 771, 748	\$ 625 186	6.887.459	18, 577, 203			10.253.724	15.451 760	12 22 000	14,433,400	28,382,271	7,756,121		134,940,622	102,224
	Transfers	1,113,933	168,263	310,975	903,074			593,253	2,273,716	776 789		2,625,517	259,026		8,932,034	9,668
	Freshmen	13,788,820	2,177,392	2,162,273	4,915,933			4,534,370	6,263,401	3,450,044		8,492,546	4,057,435		49,842,214	40,258
		Gift Aid	Grants-in-Aid	Loan Punds	Jobs			800	NDEA	CWSP			State Scholarships		TOTAL	Unduplicated Students on Aid
	1	.I.	TVNC	1 <b>11</b> 11	l		#	L.	1_	T V	30	ISI	uo - T -	L_	+	

SEEK ING	NO. OF SCHOOLS = 78
CING ALD	NO. OF SCHOOLS = 73
	NO. OF SCHOULS = 75
NTS ON ATO	NO. UF SCHOOLS = 73
NTS ON ALD	NO. OF SCHOOLS = 74
OUATES ON ALO	NO. OF SCHOOLS = 65
TAL ATO	NO. CF SCHOOLS = 71
· · · · · · · · · · · · · · · · · · ·	NO. OF SCHOOLS = 37
S	NO. OF SCHOOLS = 37
IS OF THITTO	NO. OF SCHOOLS = 37
0 18 0	NO. OF SCHOOLS = 26
AL ALO	NO. OF SCHOOLS = 37
<b>,</b> ,	NO. OF SCHOOLS = 37
, ₽	NO. OF SCHOOLS = 37
01A A70	NO. OF SCHOOLS = 37
	NO. OF SCHOOLS = 37
STUDENT	NO. OF SCHOOLS = 33
	NO. OF SCHOOLS = 37
	NO. OF SCHOOLS = 57
	NO. OF SCHGOLS = 53
1 A C	NO. GF SCHOOLS = 55
•	NO. OF SCHOOLS = 44
	NO. OF SCHOOLS = 49
TOTAL ATD PER STUDENT	NO. OF SCHOOLS = 33
	NO. OF SCHOOLS = 37
	NO. OF SCHOOLS = 26
;	NO. GF SCHOOLS = 62

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TOTAL POPULATION

/			
	PUBLIC SCHOCLS TOTAL NUMBER OF SCHOCLS = 41		
	PER CENT TRANSPER APPLICANTS SEEKING ATIN		UP SCHOOLS = 35
	0.00 . 0.000 D . 0.000	O CN	OF SCHOOLS = 32
	10 0 1 V	NO.	CF SCHOOLS' = 33
,	TEN CENT PENALE APPLICANTS SERVING AID	NO . OF	F SCHDOLS = 32
	PER CEAT OF PRESENTEN STUTENTS ON AID	NO • OF	F SCHOOLS = 32
	PER CENT OF TRANSFER STUDENTS ON AID	AC • OF	SCHOOLS .
	PER CENT DE OTHER UNDERGRADUATES ON ATO		- STOCKS
	PER CENT TOTAL GIFT AID IS CF TOTAL AID		מבוסור בי
	PER CENT TOTAL GIFT AIC IS OF TUITION INCOME		CTOOLS .
	PER CENT INSTITUTIONAL AID IS OF TATAL AID		י ביייטריט
	PER CENT INSTITUTIONAL AIG IS OF TUITION INCOME		
		NO. CF	. SCHOOLS = 13
		NO. OF	SCHOOLS = 17
	GF TOTAL	NO. OF	SCHOOLS = 17
•	TER CENT JUB ALG IS OF TOTA	NO. CF	SCHOOLS = 17
	PER CENT FEDERAL AID IS OF TOTAL AID 30	NO. OF	SCHOOLS = 17
	PER CENT STATE AIG IS OF TOTAL AID	NO. OF	SCHOOLS .
	INSTITUTIONAL AID PER STUDENT ON AID	NO. OF	
	INSTITUTIONAL ATO PER STUJENT		SCHOOLS
	FEDERAL AID PER STUDENT ON AID		
	STATE ALD PER STUDENT ON AID		N N
	GUARANTEED LOAN AID PER STUDENT ON AID		SCHOOLS # 22
		NO. OF	SCHOOLS = 23
		NO. OF	SCHOOLS = 19
	_,	NO. 0F	SCHOOLS = 23
	ICIAL AIG PER STUCENT ON AIG 1,068	NO. OF	SCHOOLS = 14
	FOTAL AID PER STUCENT	NO. OF	SCHOOLS = 17
	PER CENT TOTAL AIG IS OF TUITION INCOME 78	NO .	
	PER CENT OF FRESHMEN & TRANSFER ALD APPLICANTS AWARDED ALD		•
	•	NO. OF	SCHUOLS = 26

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PRIVATE SCHOOLS  TOTAL NUMBER OF SCHOOLS = 45	
؛ ،	1
DEN CENT TAZISFER APPLICANTS SECRING AID	<b>B</b>
	NO OF SCHOOLS = 41
710 000 010	NO. CF SCHOOLS = 42
TO STATE OF THE STATE OF	NO. OF SCHOOLS = 41
	NO. OF SCHOOLS = 42
OF OTHER WARFRON MINTER ON	NO. CF SCHOOLS = 39
IS EF TOTAL ATO	NO. CF SCHOOLS = 42
18 OF TUITION PROPER	NO. OF SCHOOLS = 20
NO IS OF TUTAL ATD	NO. OF SCHOOLS = 19
OF TUITION INCOME	NJ. OF SCHOOLS = 26
• • • • • • • • • • • • • • • • • • • •	NO. OF SCHOOLS = 19
TOTAL AID	NO. CF SCHOOLS = 20
1410	NO. DF SCHOOLS = 26
OF TOTAL	NO. OF SCHOOLS = 26
	NO. OF SCHOOLS = 26
HOENT ON AS	NO. OF SCHOOLS = 26
STOOP WE	NO. OF SCHOOLS = 19
R STUDENT ON ALD	NO. OF SCHOOLS = 26
9	HD.
	n T
OF NO L	NO. CF SCHOOLS = 32
; •	ND. OF SCHOOLS # 29
• •	NO. OF SCHOOLS = 26
	NO. OF SCHOOLS = 23
	.'0. OF SCHOOLS = 26
SHOOM I TOOM IS	NO. CF SCHOOLS = 13
	NU. CF SCHOULS # 36

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ERIC AFUITANT Provided by ERIC

SPALL SCHOOLS TOTAL NUMBER OF SCHOOLS = 29	
ICANTS	N . CF SCHOOLS = 27
MAIN APPLICANTS SEEM	NO. OF SCHOOLS = 27
13 SEENING AR	NO. OF SCHOOLS = 27
OF PRESENT OF COURTS OF STREET	NO. CF SCHOOLS = 27
TODENTS (IN AL	NO. OF SCHOOLS = 28
Cours on all	AG. OF SCHOOLS = 26
O IS CF TOTAL AID	NO. OF SCHOOLS = 28
IS OF TUITION TAYOUR	NO. OF SCHOOLS = 15
AID IS OF TOTAL AID	NO. OF SCHOOLS = 13
OF TUITION INCOME	NO. OF SCHOOLS = 15
• • • • • • • • • • • • • • • • • • •	NO. OF SCHOOLS = 10
TCTAL ATO	NO. OF SCHOOLS = 15
1016.	NO. OF SCHOOLS = 15
	NO. OF SCHOOLS = 15
	NO. OF SCHOOLS = 15
THOUSE AND	NO. OF SCHOOLS = 15
INSTITUTIONAL AID DEB CENTERS	NO. OF SCHUOLS = 14
	NO. OF SCHOOLS = 15
UDENT ON ATO	NO. OF SCHOOLS = 24
STUDENT OF ATO	NO. OF SCHUOLS = 22
	NO. CF SCHOOLS = 21
t 5	NO. OF SCHOOLS = 17
TOTAL AID PER STUDENT ON ACC	NO. OF SCHOOLS # 18
_	NO. OF SCHOOLS = 14
• "	JO. OF SCHOOLS = 15
NOT NOT STOP	NO. OF SCHOOLS = 10
THE STATE OF THE STANSFER AID APPLICANTS ANDRONE OF A 49	NO. CF SCHOOLS = 25

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PER CENT FRESHMEN APPLICANTS SEEKING AID	NO. OF SCHOOLS * 36
PER CENT TRANSFER APPLICANTS SEEKING AID 14	NO. OF SCHOOLS = 32
PER CENT MALE APPLICANTS SEEKING AIG	NO. CF SCHOOLS = 34
PEH CENT FEMALE APPLICANTS SEEKING AID	NO. OF SCHOOLS = 32
PER CENT OF FRESHMEY STUDENTS ON AID	NO. OF SCHOOLS # 30
PER CENT OF TRANSFER STUDENTS ON ALD	NO. CF SCHDOLS = 24
PER CENT UF UTHER UNDERGRADUATES ON AID 47	NO. OF SCHOOLS = 28
PER CENT TOTAL GIFT ALO IS CF TOTAL AID 47	NO. CF SCHOOLS = 13
PER CENT TOTAL CIFT AID IS OF TUITION INCOME 20	NO. OF SCHOOLS - 18
PER CENT INSTITUTIONAL AIG IS CF TOTAL AID	NO. OF SCHOOLS = 13
PER CENT INSTITUTIONAL AID IS OF TUITION INCOME 27	NO. OF SCHOOLS = 10
PER CENT GUARANTEED LOAN AID IS TIF TOTAL AID	NO. OF SCHOOLS = 13
PER CENT LOAN ATO IS CF TOTAL ATO	NO. CF SCHOOLS = 13
PER CENT JOB AIC IS OF TOTAL AID	NO. GF SCHOOLS = 13
PFR CENT FECERAL AID IS OF TOTAL AID	NO. OF SCHOOLS = 13
PER CENT STATE ALC IS OF TOTAL AID	NO. OF SCHOOLS = 13
INSTITUTIONAL AID PER STUDENT UN AID	NO. CF SCHOOLS = 12
INSTITUTIONAL AIG PER STUDENT	NO. OF SCHOOLS # 13
FEGERAL AID PER STUCENT ON AID 308	NO. OF SCHOOLS = 18
STATE AID PER STUCENT GN AID 66	NO. OF SCHOOLS * 21
GUARANTEED LOAN AIC PER STUDENT ON AID	NO. CF SCHODLS - 21
TCTAL GIFT AIC PEP STUDENT ON AID	NO. OF SCHOOLS = 20
TCTAL GIFT AIC PEP STUDENT 168	NO. CF SCHOOLS - 22
TOTAL AID PER STUDENT ON AID 1,041	NO. CF SCHOOLS = 12
TOTAL AID PER STUCENT 413	ND. OF SCHOOLS = 13
PER CENT TOTAL AIR IS OF TUITION INCOME 58	NO. OF SCHOOLS = 10
PER CENT OF FRESTMEN & TRANSFER AID APPLICANTS AWARDED AID 44	NO. OF SCHOOLS = 23

TOTAL NUMBER OF SCHOCLS = 38

MECTUR SCHOCLS

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LAPGE SCHEGLS TOTAL NUMBER OF SCHOCLS = 19	
PCH CENT FRESHMEN SPPLICANTS SEEKING AID	NO. CF SCHOOLS = 15
PER CENT TRANSFER SPALICANTS SEEKING AID	NO. OF SCHOOLS = 14
PER CENT MALE APPLICANTS SEEKING AID	NO. CF SCHOOLS = 14
PER CENT FEMALE APPLICANTS SEEKING AID	NO. CF SCHOOLS = 14
PER CENT OF FRESHMEN STUDENTS ON ATD	NO. OF SCHOOLS = 16
PER CENT UF TRANSFER STLUCENTS ON AID	NO. CF SCHOOLS = 15
PER CENT UF UTHER UNCERGRADLATES ON AID	NO. OF SCHOOLS = 15
PER CENT TOTAL GIFT AIC IS OF TOTAL AID	NO. OF SCHOOLS = 9
PER CENT TOTAL GIFT AID IS OF TUITION INCOME	NO. OF SCHOOLS . 6
PER CENT INSTITUTIONAL AID IS OF TOTAL AID	NO. DF SCHOOLS = 9
PER CENT INSTITUTIONAL AID IS OF TUITION INCOME	NO. OF SCHOOLS = 6
PER CENT GUARANTEED LOAN AID IS OF TOTAL AID	NO. CF SCHOOLS = 9
PER CENT LOAN AIG IS CF TCTAL AID	NO. CF SCHOOLS = 9
PER CENT JOE ALC IS OF TOTAL AID	NO. DF SCHOOLS = 9
PER CENT FECERAL AIG IS OF TOTAL AID	NO. CF SCHOOLS = 9
PER CENT STATE AIC IS GF TOTAL AID 6	NO. OF SCHOOLS = 9
INSTITUTIONAL AID PER STUDENT ON AID 568	NO. DF SCHOOLS = 7
INSTITUTIONAL AIG PEP STUDENT 185	NO. OF SCHOOLS = 9
FEDERAL AID PER STUDENT ON AID 295	NO. OF SCHUOLS = 15
STATE A TO PER STUDENT ON A 10	NG. OF SCHOOLS = 10
GUARANTEED LOAN AID PER STUDENT ON AID	NO. CF SCHOOLS = 13
TGTAL GIFT AIC PER STUDENT ON AID	NO. OF SCHOOLS .
TGTAL GIFT AIC PER STUNENT	NO. DF SCHOOLS = 9
TCTAL AID PER STUDENT ON AID 1,218	NO. OF SCHOOLS = 7
TGTAL A10 PER STUDENT 402	NO. OF SCHOOLS = 9
PER CENT TOTAL AIC IS OF TUITION INCOME 61	NO. OF SCHOOLS # 6
PER CENT OF FPESHMEN & TPANSFEK AID APPLICANTS AWARDED AID 42	NO. CF SCHOOLS # 14



EASTERN SCHOOLS TUTAL NUMBER OF SCHOOLS	
PER CENT TRANSFER APPLICANTS SEEKING AID	ב
PER CENT MALE APPLICANTS SEEKING ATD	ŗ,
	P
	9
Tr NO	<b>0</b>
TES CN AID	· CF SCHOOL
PER CENT FOTAL GIFT AIG IS CF TOTAL AID	
	r.
10 IS OF TOTAL ATO	NO. OF SCHOOLS = 12
ATO IN OF THIRTIDA PACCAL	NO. OF SCHOOLS = 9
ET HOTTED TO SE CHARACTE	NO. OF SCHOOLS .
C CLAN AIU	NO. OF SCHOOLS = 9
CENT LUAN ALG IS GF	NO. OF SCHOOLS . 9
0F TOTA	NO. CF SCHOOLS = 9
CENT PECERAL ATO IS O	NO. OF SCHOOLS = 9
2	NO. OF SCHOOLS = 9
INSTITUTIONAL AID PER STUDENT ON AID 685	NO. CF SCHOOLS = 9
INSTITUTIONAL AIC PER STUDENT	NO. CF SCHOOLS = 9
DENT L	NO. OF SCHOOLS = 19
NT GN AID	NO. CF SCHOOLS = 15
D PER STUDEN	NO. CF SCHOOLS = 17
	NO. OF SCHOOLS = 13
7	NO. OF SCHOOLS = 14
TOTAL ALL PER STUDENT: ON AID	NO. OF SCHOOLS = 9
	NO. OF SCHOOLS = 9
CENT TOTAL AIG IS O	NO. CF SCHOOLS = 8
PER CENT OF FRESTMEN & TRANSFER ALU APPLICANTS AWAROEC ALD 22	NO. OF SCHOOLS = 20

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	į		
PER CENT 143%SPER APPLICANTS SERVING AND	27 NO.	GF SCHOOLS =	_
LICANTS SEEK TWG ATD	15 NO.	CF SCHOOLS = 1	~
PELICANTS SESSIONS	20 ND.	OF SCHOOLS = 1	-
OF FPESTER STUDENTS SERVED	33 NO.	OF SCHOOLS = 1	_
ER STEDENTS ON	40 NO.	OF SCHOOLS =	-
UNCERCABINATES CH	20 NO.	CF SCHOOLS =	•
T AID IS CF TOTAL	47 NO.	CF SCHOOLS =	Ψ.
T A1C 15 GF	40 NO. (	OF SCHOOLS =	_
CNAL AID IS	32 NO. (	OF SCHOOLS =	•
CNAL ATO IS OF	35 NO. (	CF SCHOOLS =	~
N ATO TO THE TOTAL	29 ND. Q	OF SCHOOLS .	S
TOT TO	17 NO. C	CF SCHOOLS .	~
IS CF TOTAL ATO	33 NO. C	CF SCHOOLS = 7	~
IS OF TO	26 NO. 0	OF SCHOOLS = 7	~
IS OF TOTAL AID	. NO. O	OF SCHOOLS = 7	_
ER STUDENT O	1 NO. 0F	F SCHOOLS = 7	_
ER STUDENT	333 NO. 0F	F SCHOOLS = 7	_
C E	il NO. CF	F SCHOOLS = 7	-
NT ON AIO	0 NO. OF	F SCHOOLS = 8	
NT ON ATO	17 NO. CF	* SCHOOLS = 7	
	9 NO. CF	SCHOOLS = 7	
	3 NO. 0F	SCHOOLS = 7	
	ND. OF	SCHOOLS = 7	
	NO. CF	SCHUOLS = 7	
S	NO. OF	SCHOOLS = 7	
S TABLE AT A BACK TA WAS TO A STATE OF THE S	NO. CF	SCHOOLS = 5	
	NO. OF	SCHOOLS .	

	24 NO. CF SCHOOLS = 1	11 NO. CF SCHOOLS = 1	22 NO. OF SCHOOLS = 1	22 NO. CF SCHOOLS = 1	42 NO. CF SCHOOLS = 1	39 NO. CF SCHOOLS = 12	34 NO. OF SCHOOLS = 14	20 NO. OF SCHOOLS = (	NO. CF	NO. OF	NO. CF	S NO. CF SCHOOLS = 8	NO. DF SCHOOLS # 6	NO. OF SCHOOLS = 6	NO. OF SCHOOLS = 6	NO. OF SCHOOLS = 6	NO. OF SCHOOLS . 5	NO. CF SCHOOLS . 6	NO. CF SCHOOLS = 11	NO. OF SCHOOLS = 10	NO. OF SCHOOLS = 11	NO. CF SCHOOLS = 10	NO. UF SCHOOLS = 11	NO. OF SCHOOLS = 5	NO. GF SCHOOLS - 6	NO. CF SCHUOLS = 3	. NO. OF SCHOOLS = 12
<b>5</b>	CENT TRESTMEN APPLICANTS SEEKING	MAIN ABBUTTANTS SEEKING ALD	CEAST PREATE ADDITIONAL CONTRACTOR CONTRACTOR ADDITIONAL CONTRACTOR CONTRACTO	A CHICANO SERVING ALO	CENT OF TRANSFER ATENEMENTS OF ATEN	UNCERGRACION AIN	T AIO IS OF TOTAL AID	CF TUITION INCOME	IS OF TOTAL ATO	N INCOME			TOTAL AID	D IS OF TOTAL ATO	IS OF TOTAL APP	TE STUCENT OF	AIC PER	Z		R STUDENT ON AID	•	STHORN ON	ATD PER STHERAT ON A 10	AIO PER STUFFET	ATO IN OR THEFTON	SENT OF FRESHMEN E TRANSFER	

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1		
CITY TARSTIEN APPLICANTS SEEKING AID		
PER CENT TRANSFER AUFLICANTS SEEKING AID	MG. CF	SCHOOLS
PER CENT MALE APPLICANTS SECKING AID	NO. CF	SCHOOLS
•	34 NO. CF SCHOOLS	י אסט
14 22 21	30 NO. CF SCHIDLS	י ציוטו
STUDENTS GN AFD	37 NO. OF SCHOOLS	ots.
CERCRADUATES OF ANY	27 NO. CF SCHOOLS	)als =
	28 NO. CF SCHOOLS	10LS =
IS OF TUITION TAYOUR	35 NO. CF SCHOOLS	a s
IS OF TOTAL ASS	27 NO. OF SCHIDLS	015 -
AID IS OF THITTON INCOME	35 NO. CF SCHOOLS	065 =
A A TO TO SE TO TAKE TO THE SECOND SE	20 NO. CF SCHOOLS	3LS =
C 15 GF TOTAL AIR	20 NO. CF SCHOOLS	345 =
IS OF TOTAL ATD	40 NO. OF SCHOOLS	)LS =
AIC IS OF TO	NO. OF SCHOOLS	1.5 =
IC IS OF TOTAL AT	S NO. OF SCHOOLS	ורא =
STUDENT	NO. OF SCHOOLS	LS =
PER STUDERT	NO. OF SCHOOLS	15 =
TUDEN	NO. CF SCHOOLS	15
	NO. OF SCHOOLS	LS = 1
GUARANTEEC LIJAN AIG PER STUGENT IN ATC	NO. CF SCHOOLS	. s = 1
R STUDENT ON ATO	NO. CF SCHOOLS	.5 = 1
	NO. OF SCHOOLS	. s.
<u> </u>	NO. OF SCHOOLS	1 = S
	NO. CF SCHUOLS	- s
9.	NA. OF SCHOOLS	S = 1
	NO. CF SCHOOLS	N S
	NO. OF SCHOOL	

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NO. CF SCHUOLS = 22	Ŀ	NO. CF SCHINGLS = 22	NO. OF SCHOOLS = 22	NO. CF SCHOOLS = 16			NO. OF SCHIJOLS . 10	NO. CF SCHOOLS = 13	NO. CF SCHOOLS . 9	NO. CF SCHOOLS = 13	NO. OF SCHOOLS = 13		OF SCHOOLS .	NO. OF SCHOOLS = 13	NO. OF SCHOOLS = 11		NO. OF SCHOOLS = 15	NO. CF SCHOOLS = 17		NO. OF SCHOOLS = 12	NO. OF SCHOOLS = 14		NA. OF SCHOOLS = 13	<b>.</b>	NO. OF SCHOOL ST.
---------------------	---	----------------------	---------------------	---------------------	--	--	----------------------	---------------------	--------------------	---------------------	---------------------	--	--------------	---------------------	---------------------	--	---------------------	---------------------	--	---------------------	---------------------	--	---------------------	----------	-------------------

SCLIMMESTERN SCHOCLS TOTAL NUMBER OF SCHOCLS = C8		
PER CENT FRESHMEN APALICANTS SEEKING AID	NO. OF SCHOOLS .	•
PER CENT TAINSFER APPLICANTS SEERING AID	CF SCHOOLS =	
PER CENT MALE APPLICANTS SEEKING AIC	, 2	
DER CENT FEMALE APPLICANTS SFEKING AID	ų.	
PER CENT OF FRESHMEN STUDENTS ON ALD		
PER CENT OF TRANSFER STUJENTS ON AID	5	
PER CENT OF OTHER UNGERCHADUATES ON AID 59		_
PER CENT TOTAL CIFT A10 IS CF TOTAL A10	NO. CF SCHOOLS = 2	
PER CENT TOTAL GIFT ALD IS OF TUITION INCOME	NO. CF SCHOOLS = 2	
PER CENT INSTITUTIONAL AID IS CF TOTAL AID 72	NO. CF SCHOOLS'= 2	
PER CENT INSTITUTIONAL ALD IS OF TUITION INCOME 61	NO. CF SCHOOLS = 1	
PER CENT GUARANTEEC LOAN AID IS OF TOTAL AIC 14	NO. CF SCHOOLS = 2	
PER CENT LOAN AIC IS CF TOTAL AID	NO. CF SCHUOLS = 2	
PER CENT JOB AIC IS OF TOTAL AID	NO. CF SCHOOLS = 2	
PER CENT FECERAL AIC IS OF TOTAL AID	NO. CF SCHOOLS = 2	
PER CENT STATE AIC IS OF TOTAL AIC	NO. CF SCHOOLS = 2	
INSTITUTIONAL AID PER STUDENT ON AIG 1,211	NO. CF SCHOOLS = 1	
INSTITUTIONAL AIC PER STUDENT 431	NO. CF SCHOOLS = 2	•
FECENAL ATO PER STUDENT ON AID 107	NO. OF SCHOOLS = 4	
STATE ALC PER STUCENT ON AIO	NO. CF SCHOOLS = 4	
GUARANTEŁD LOAN AID PER STUCENT ON AIO	NO. CF SCHOOLS = 4	
TCTAL GIFT AIC PER STUDENT ON AIO 370	NO. OF SCHOOLS = 2	
TCTAL GIFT AIC PER STUDENT	NO. OF SCHOOLS = 3	
TOTAL AIC PER STUDENT ON AID 1,404	NO OF SCHOOLS = 1	
TCTAL AIG PER STUCENT	NO. OF SCHOOLS = 2	
PER CENT TOTAL AIC IS OF TUITION INCOME 71	NO. CF SCHOOLS = 1	
PER CENT IN FRESHMEN & TRANSFER ALU APPLICANTS AMARDED ALD 57	NO. CF SCHOOLS = 4	

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	SPALL PUBLIC SCHECLS TOTAL NUMBER OF SCHOOLS = 14	
	PER CENT FRESHEN APPLICANTS SFEKING AID	NO. CF SCHOOLS = 12
	PER CENT TAMISFEM APPLICANTS SEEKING AID	
	PER CENT WALE JOPLICANTS SEENING AID	NO. CF SCHOOLS = 12
	PER CENT FEWALE APPLICANTS SEEKING AID	NO. CF SCHOOLS = 12
	PER CENT OF FRESHMEN STUDENTS ON AID	NO. OF SCHOOLS - 13
	PER CENT OF TPANSFEZ STUDENTS ON AID	NO. CF SCHOOLS = 11
	PER CENT OF OTHER UNCERCHANGES ON AID	NO. CF SCHOOLS = 13
_	PER CENT TGTAL CIFT A10 IS CF TCTAL A10	NO. CF SCHOOLS = 6
	PER CENT TOTAL GIFT AID IS CF TUITICN INCOME	NO. CF SCHOOLS = 6
-	PER CENT INSTITUTIONAL AID IS GF TOTAL AID	NO. OF SCHOOLS = 6
	PER CENT INSTITUTIONAL AID IS OF TUITION INCOME	NO. GF SCHOOLS . 4
	PER CENT GUARANTEEC LCAR AIG IS CF TOTAL AIG	NO. CF SCHOOLS = 6
-	PER CENT LOAN AIC IS OF TCTAL AID 51	NO. OF SCHOOLS = 6
	PER CENT JOB AIC IS OF TOTAL ATO 36	NO. CF SCHOOLS . 6
^	PER CENT FECERAL AID IS UF TOTAL AID 51	NO. OF SCHOOLS = 6
1	PER CENT STATE ALE IS OF TOTAL AIO	NO. OF SCHOOLS . 6
		NO. OF SCHOOLS = 5
	INSTITUTIONAL AIG PER STUDENT	NO. OF SCHOOLS = 6
	z	NO. CF SCHGOLS = 11
	6	NO. OF SCHOOLS - 8
_	GUARANTEEL LOAM A10 PER STUCENT ON A10 346	NO. CF SCHOOLS . 8
	TCTAL GIFT AIC PER STUDENT ON AID 205	NO. OF SCHOOLS . 7
•		NO. OF SCHOOLS . 8
- 1	TCTAL AID PER STUCENT ON AID 1,276	NO. OF SCHOOLS - 5
-		NO. OF SCHOOLS = 6
	S	NO. CF SCHOOLS = 4
7	PEH CENT OF FRESTMEN E TRANSFER AID APPLICANTS AWARDED AID 67	NO. CF SCHUOLS # 10

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MEDIUM PUBLIC SCHOOLS TOTAL AUPBER OF SCHOOLS = 17	
•	
	CF SCHOOLS = 1
PER CENT MALE APPLICANTS SEEKING AID	֭֭֭֡֡֡֞
2	n n
ENTS ON AIO	r.
Old NO STATE	r F
AL Ato	2
	. נ
	NO. CT SCHOOLS
PER CENT INSTITUTIONAL AIG IS OF TUITION INCOME	ָב ל כ
PER CENT GUARANTEED LOAN AIG IS OF TOTAL AID	מו פרשמונים
PER CENT LOAN ATD IS CF TC/AL AID	ל ל
PER CENT JOR ALC IS GF TOTAL AID	5 (
PER CENT FECERAL AIC IS OF 10TAL AIO	ל ל
PER CENT STATE AIC IS OF TOTAL AID	
0.4 × 0.4 ×	NO. GF SCHOOLS . 5
STUDENT	NO. CF SCHOOLS = 4
OIA NO F	NO. OF SCHOOLS = 5
	5
UDENT ON ATO	6
	NO. CF SCHOOLS = 7
GIFT AIF DEP STIDENT	NO. CF SCHOOLS = 7
AIC DEP CHICKNEY ON AN	NO. OF SCHOOLS = 9
TOTAL ALC DED STREET	NO. OF SCHOOLS = 4
•	NO. OF SCHOOLS = 5
<u> </u>	NO. OF SCHOOLS . 5
THE CENT OF PRESTREM & THANSFER ATU APPLICANTS ANARDEC ATC 42	MO. CF SCHOOLS = 8

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.28 NO. CF SCHOOLS = 8	16 NO. CF SCHOOLS = 8	26 NO. OF SCHOOLS = 8	23 NO. CF SCHOOLS = 8	39 NO. OF SCHOOLS . 8	26 NO. CF SCHOOLS = 7	30 NO. CF SCHOOLS = 7	22 NO. CF SCHOOLS 6	17 NO. CF SCHOOLS . 4	41 NO. OF SCHOOLS = 6	28 NG. OF SCHOOLS = 4	26 NO. CF SCHOOLS = 6	40 NO. CF SCHOOLS - 6	36 NG. CF SCHOOLS = 6	26 NO. OF SCHOOLS = 6	6 NO. OF SCHOOLS = 6	471 NO. OF SCHOULS = 5	151 NO. CF SCHOOLS = 6	262 NO. OF SCHOOLS = 8	59 NO. CF SCHOOLS = 7	254 NO. CF SCHOOLS = 8	260 NO. CF SCHOOLS = 5	83 NO. OF SCHUOLS = 6	*126 NO. OF SCHUOLS = 5	364 NO. CF SCHOOLS = 6	72 NO. CF SCHOOLS = 4
LARGE PUBLIC SCHOOLS  TOTAL NUMBER OF SCHOOLS = 10  PER CENT FRESHUEN APPLICANTS SEEKING AID	ICANTS SEEK	3 A I	PER CENT OF FRESHMEN STUDENTS ON AID	Š	TES CN A	₹ ₹		PER CENT 14ST ITLT 10NAL A10 15 OF TOTAL 210	6	S		010	0	•		•	TO ALC TA		IN CK A10		TAJOR	TCTAL AID PER STUCENT CN AID		OF TUITION INCOME	

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	SMALL PRIVATE SCHECLS TOTAL NUMBER C	OF SCHOCLS	כר צ	15					
	PER CENT FRESTMEN APPLICANTS SEEKING AID	•	•	•	9,	NO.	P,	SCHOOLS - 1	2
	PER CENT TRANSFER SPPLICANTS SEEKING ALU	•	•	•	35	Š	r,	SCHOOLS = 15	50
	PFG CENT MALE APPLICANTS SEEKING AIG	•	•	•	89	Š	CF SCI	SCHOOLS = 15	67
-1	PEP CENT FEWALE APPLICANTS SFEKING AIC	•	•	•	31	<u>%</u>	CF SC	SCHOOLS - 1	'n
	PER CENT OF FRESHMEN STUJENTS ON AID	•	•	•	₩	S O N	CF SC	SCHOOLS = 15	5
	PER CENT OF TRANSFER STUDENTS ON AID	•	•	•	31	Ŏ.	C.F.	SCHOOLS = 1	•
	PER CENT GF OTHER UNCERGRADUATES CN AID	•	•	•	*	2	C.F.	SCHOOLS - 1	S
	PER CENT TOTAL CIFT AID IS CF TOTAL AID	•	•	•	S	Š.	90	SCHOOLS .	<b>D</b>
	PER CENT TOTAL GIFT AID IS OF TUITION INCOME	•	•	•	38	NO.	'n	SCHOOLS =	_
	PER CENT INSTITUTIONAL AID IS OF TOTAL AID	•	•	•	38	Š.	9	SCHOOLS .	<b>D</b>
	PER CENT INSTITUTIONAL AID IS OF TUITION INCOME	•	•	•	54	Ĉ	OF	SCHOOLS .	_
	PER CENT GUAZANTEEC LCAN AIG IS OF TOTAL AIO	•	•	•	**	Š	Ŗ	SCHOOLS =	<b>6</b>
	PER CENT LOAN AIC IS OF TOTAL AID	•	•	•	32	<b>%</b>	Ç	SCHOOLS =	
	PER CENT JOE AID IS OF TOTAL AID	•	•	•	11	, O	,	SCHOOLS .	•
_	PER CENT FECERAL AIC IS OF TOTAL AID	•	•	•	39	Š.	OF SC	SCHOOLS =	
	PER CENT STATE ALE IS OF TOTAL AID	•	•	•	-	9	OF SC	SCHOOLS =	•
	INSTITUTIONAL AIG PER STUDENT ON AID	•	•	•	629	, O	ñ	SCHOOLS =	•
	INSTITUTIONAL AID PER STUDENT	•	•	•	316	Š	9	SCHOOLS .	•
	FECERAL AID PER STUDENT O: AID	•	•	•	514	Š.	OF SC	SCHOOLS = 13	•
	STATE AID PER STUCENT ON AID	•	•	•	231	Š.	9	SCHOOLS = 14	
	GUARANTEES LUAN AIG PER STUGENT ON AID	•	•	•	226	Š.	f.	SCHOOLS = 13	m
	TOTAL GIFT AIC PER STUDENT ON AID	•	•	•	<b>589</b>	N O	Ç	SCHOOLS - 10	_
	TCTAL GIFT AIC PER STUDENT	•	•	•	515	NO.	P	SCHOOLS - 10	_
	TCTAL AIC PER STUCENT ON AIG	•	•	•	1,623	Š.	OF SCH	SCHOOLS =	σ.
^	TCTAL ATO PER STUCENT	•	•	•	916	Š.	OF SCH	SCHOOLS = 4	•
	PER CENT IOTAL AIC IS OF TUITION INCOPE	•	•	•	61	- CN	C.F.	SCHUOLS = (	•
	PER CENT OF FRESHMEN & THANSFFR ALL APPLICANTS AM	AWARCED 4	41C .	•	34	0	O.	SCHIOULS = 19	

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CENT TOWNSHER APPLICANTS	NO. C.F. C.
	. 6
S SERVICE ATO	AO. CF SC
TS UN ALD	AO. CF SC
A	NG. OF SC
	NO. CF SC
AL AID	NO. OF SCI
TUITION INCOME	NO. CF SC
PER CENT INSTITUTIONAL AID IS OF TOTAL AID	NO. OF SCH
PER CENT INSTITUTIONAL ATO IS OF TUITION INCOME.	NO. OF SCH
PER CENT GUARANTEEC LCAN ALO IS OF TOTAL ALC	NO. OF SCH
0	NO. CF SCH
01	NO. CF SCH
<b>A1</b> 0	NO. OF SCHE
	NG. OF SCHO
Z	NO. OF SCHO
	NO. OF SCHO
0	NO. OF SCHO
•	NO. CF SCHOL
CJV	NO. OF SCHOO
	NO. CF SCHOO
	NO. OF SCHOO
TUTAL AID PER STUCENT ON AID	NO. OF SCHOO
	NO. OF SCHOOL
TOTAL AIL IS UF TUITION INCUME	NO. OF SCHOOL
	NO. OF SCHOOL
	NO. OF CLUOS.

		AO. CF SCHUOLS = 21	AO. CF SCHOOLS = 20	NO. OF SCHOOLS = 19	NO. CF SCHOOLS = 16	NO. OF SCHOOLS = 19	NO. CF SCHOOLS = 8	NO. OF SCHOOLS - 10	NO. OF SCHOOLS . 8	NO. OF SCHOOLS = 5	AG. CF SCHOOLS . 8	NO. CF SCHOOLS	NO. OF SCHOOLS . 8	NO. OF SCHOOLS = 8	NO. CF SCHOOLS = 32	NO. OF SCHOOLS = 14	NO. CF SCHOOLS = 14	NO. OF SCHOOLS = 13	NO. OF SCHOOLS = 13	NO. OF SCHOOLS = 8	NO. OF SCHOOLS = 8	NO. OF SCHOOLS = 5	NO. OF SCHOOLS = 15			
--	--	---------------------	---------------------	---------------------	---------------------	---------------------	--------------------	---------------------	--------------------	--------------------	--------------------	----------------	--------------------	--------------------	--------------------	--------------------	--------------------	---------------------	---------------------	---------------------	---------------------	---------------------	--------------------	--------------------	--------------------	---------------------

LANGE PRIVATE SCHOOLS TOTAL NUMBER OF SCHOOLS = 09	
•	NO. CF SCHOOLS 7
PER CENT THANSFER APPLICANTS SECRING ATD	CF SCHOOLS =
PER CENT WALE APPLICANTS SEEKING AID	ָ נ
PER CENT FENSILE APPLICANTS SEEKING AID	
PER CENT OF FRESHMEN STLDENTS ON ALD	ט
PER CENT OF TRANSFER STUDENTS ON AID	, u
PER CENT OF UTHER UNCERGRADUATES ON AID	9
PER CENT TOTAL GIFT ALD IS CF TOTAL AID 65	<b>.</b>
PER CENT TOTAL CIFT AID IS CF TUITION INCOME	n C
PER CENT INSTITUTIONAL AID IS OF TOTAL AID 66	P
PER CENT INSTITUTIONAL AID IS OF TUITION INCOME	5
PER CENT GJARANTEES LGAN AID IS OF TOTAL AID	NO. CF SCHOOLS # 3
PER CENT LCAN AID IS OF TCTAL AID	
PER CENT JOE ATC IS OF TOTAL ALS	£
PER CENT FECERAL AIC IS OF TOTAL AID	NO. OF SCHOULS = 3
PER CENT STATE AIC IS OF TOTAL AID	NO. OF SCHOOLS = 3
INSTITUTIONAL AIG PER STUDENT ON AID 1,337	NO. OF SCHOOLS = 2
INSTITUTIONAL AID PER STUDENT	NO. OF SCHOOLS = 3
FECERAL AID PER STUCENT ON AID 387	NO. OF SCHOOLS . 7
STATE ALC PEP STUCENT ON AID 160	NO. CF SCHOOLS . 3
GUARANTEED LUAN A1D PER STUDENT UN A1D	NO. CF SCHOOLS . 5
TCTAL GIFT AIC PER STUCENT ON AID 1,400	NO. OF SCHOULS = 2
TCTAL GIFT AIC PER STUDENT	NO. OF SCHOOLS = 3
TOTAL AIC PER STUDENT ON AID 1,938	NO. OF SCHOOLS = 2
TOTAL AID PER STUCENT 740	NO. OF SCHOOLS = 3
PEP CENT TOTAL AIC IS OF TUITION INCOME	NO. CF SCHOOLS = 2
PER CENT OF FRESTEEN & THANSTER ATD APPLICANTS AWAPDEC AIC 18	NO. CF SCHOOLS . 6

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	PUBLIC EASTERN SCHOOLS TOTAL NUMBER OF SCHOOLS = 10		
	PER CENT FRESHMEN APPLICANTS SEEKING AID		
	PER CENT TRANSFER APPLICANTS SEEKING AID		
V	PER CENT 42LE JPPLICANTS SEEMING AIG	ָּהָים ניל סיבי	
	PER CENT FEMALE APPLICANTS SEEKING AID		
	PER CENT OF FALSHMEN STUDENTS ON AIG		
	PER CENT CF TPANSFER STUDENTS UN AID	NO . CF	
	PER CENT OF OTHER UNDERGRADLATES ON AID	NO. CF	
	PER CENT TCTAL CIFT AID IS OF TOTAL AID	, S	
	PER CENT TOTAL CIFT AID IS CF TUITICN INCOME		
	PER CENT INSTITUTIONAL AID IS GF TOTAL AID	NO. OF SCHOOLS # 3	
	PER CENT INSTITUTIONAL AIG IS OF TUITION INCOME	NO. OF SCHOOLS = 3	
	PER CENT GUARANTEEC LGAN AID IS OF TOTAL AIO		
	PER CENT LCAN AID IS CF TCTAL AID 50		
	PEF CENT JOB AIC IS OF TOTAL AID	NO. OF SCHOOLS	
	PER CENT FECERAL AIG IS OF 10TAL AID	NO. OF SCHOOLS = 3	
	PER CENT STATE ALC IS OF TOTAL AID	9	•
	INSTITUTIONAL AID PER STUDENT ON AID	ñ	
	INSTITUTIONAL AIG PER STUGENT		
	FECERAL AIC PER STUDENT ON AID	NO. OF SCHOOLS # 28	•
	STATE AIC PER STUCENT ON AID	P.	
	GUARANTEEC LOAN AIC PER STUDENT ON AID	NO. OF SCHOOLS . 6	
	TCTAL GIFT AIC PER STUDENT ON AID	NO. CF SCHOOLS = 6	
	TCTAL GIFT AIC PER STUDENT	NO. OF SCHOOLS = 7	
	TCTAL AID PER STUCENT ON AID 1,130	NO. OF SCHOOLS = 3	
	TUTAL AIG PER STUDENT	NO. DF SCHOOLS * 3	
, ,	PER CENT TOTAL AIL IS OF TUITION INCOME	NO. CF SCHOOLS # 3	
	PER CENT OF FRESHMEN & TRANSFER AID APPLICANTS AMARCEC AIC 25	90	



SOURCE NOMBER OF SCHOOLS # 05	
PER CENT FRESHMEN APPLICANTS SEEKING 210	NO. CF SCHOOLS
PER CENT TRANSFER APPLICANTS SEFKING AID	; ;
PER CENT WALE APPLICANTS SEEKING AIC	5 .
PER CENT FEWALE APPLICANTS SEEKING AIG 34	
PER CENT OF FRESTMEN STUDENTS ON AID	ב ל
PER CENT OF TRANSFER STUDENTS ON, AID	ָר ה
PER CENT OF OTHER UNCEPGRACLATES ON AID	NO. CT SCHOOLS II 4
S CF TGTAL A10	, u
PER CENT TOTAL GIFT AIG IS OF TUITION INCOME	
1S 0F	NO. CF SCHOOLS = 3
1 1S OF 1U	NO. CF SCHOOLS = 3
PER CENT GUARANTEED LOAN AID IS OF TOTAL AID	NO. CF SCHOOLS = 3
PER CENT LOAN AIG IS CF TOTAL AID	AG. CF SCHOOLS # 3
PER CENT JOB AIC IS OF TOTAL AID	NO. CF SCHOOLS = 3
PER CENT FECERAL AIC IS OF TOTAL AIC	NO. OF SCHOOLS = 3
PER CENT STATE AIC IS OF TOTAL AID	NO. CF SCHOOLS = 3
INSTITUTIONAL AIC PER STUDENT ON AIO 372	
INSTITUTIONAL AID PER STUCENT	, u
FECERAL AIC PER STUDENT ON AID 352	, L
STATE A10 PER STUCENT ON A10	, "
GUARANTEED LIJAN AID PER STUDENT ON AID	. L
TCTAL GIFT AIC PER STUDENT CN AID	NO. OF SCHOOLS . 3
GIFT AIL	NO. OF SCHOOLS = 3
_	NO. OF SCHOOLS = 3
•	NO. OF SCHOOLS = 3
ITION INC	NO. OF SCHOOLS = 3
PER LENI GF FRESFPEN & TRANSFER AID APPLICANTS AWARCEC AIC 43	NO. CF SCHOOLS = 4

TOTAL NUMBER OF SCHOCLS = 05

PUPLIC SCUTHERN SCHOOLS

PUPLIC MICHESTEPN SCHOOLS TOTAL NUMBER OF SCHOOLS = 10	
JER CENT PRESENTEN APPLICANTS SEENING AID	NO. CF SCHOOLS = 8
PER CENT TRANSFER APPLICANTS SEEKING AID	NO. GF SCHOOLS = 7
PER CENT MALE APPLICANTS SEEKING AIC	S,
PER CENT FEMALE APPLICANTS SEEKING AID	45
PER CENT OF FRESPOEN STUDENTS ON AID	NO. CF SCHOOLS = 8
PER CENT OF TRANSFER STUDENTS ON AID 41	NO. OF SCHOOLS = 6
PER CENT OF DIFER LNSEACHABLATES ON AID	NO. OF SCHOOLS = 8
PER CENT TOTAL CIFT AID IS OF TOTAL AID	NO. CF SCHOOLS = 5
PER CENT TOTAL GIFT AIL IS OF TLITICN INCOME	NO. OF SCHOOLS = 4
PER CENT INSTITUTIONAL AIO IS OF TOTAL AID	NO. OF SCHOOLS = 5
PER CENT INSTITUTIONAL AIG IS OF TUITION INCOME	NO. GF SCHOOLS = 3
PER CENT GUARANTEEC LCAN AID IS OF TOTAL AIC	NO. OF SCHOOLS = 5
PER CENT LCAN AIC IS CF TCTAL AIO	NO. CF SCHOOLS = 5
PER CENT JOB AIC IS OF TOTAL AID	NO. CF SCHOOLS = 5
PER CENT FECERAL AIG IS OF TOTAL AID	NO. CF SCHOOLS = 5
PER CENT STATE ALC 1S OF TOTAL AID	- NO. CF SCHOOLS - 5
INSTITUTIONAL AIG PER STUCENT ON AIO	NO. CF SCHOOLS - 4
INSTITUTIONAL AIC PER STUDENT	NO. OF SCHOOLS = 5
FECERAL AID PER STUCENT ON AIO	NO. CF SCHOOLS = 6
STATE ALC PER STUCENT ON AID 60	NO. OF SCHOOLS = 5
GUARANTEED LOAN AID PER STUDENT ON AID 212	NO. CF SCHOOLS = 6
TCTAL GIFT AIC PER STUDENT ON AIO	NO. CF SCHOOLS = 5
TCTAL GIFT AIC PER STUDENT 68	NO. OF SCHOOLS = 6
	NO. OF SCHOOLS # 4
TCTAL AID PER STUCENT	NO. OF SCHOOLS = 5
PER CENT TOTAL AIC IS OF TUITION INCOME	NO. CF SCHOOLS = 3
PER CENT OF FRESHMEN E TRANSFER ATO APPLICANTS AWARDED ATD 119	NO. OF SCHOOLS = 6

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PLALIC WESTERN SCHCCLS TOTAL NUMBER OF SCHOCLS = 10  PER CENT FRESTWEN APPLICANTS SEFKING AIC	NO. CF SCHOOLS = 9 NO. CF SCHOOLS = 8
PER CENT FEMALE APPLICANTS SEEKING ALD	NO. CF SCHOOLS = 8
CENT GF FRESHMEN STUDENTS ON AIG	CF
	NO. CF SCHOOLS = 4
CUATES CV	NO. CF SCHOOLS . S
PER CENT TOTAL GIFT ATO IS CF TOTAL ATO	NO. CF SCHOOLS = 6
CENT INSTITUTIONAL AID IS OF TOTAL AID	
PER CENT INSTITUTIONAL AIG IS OF TUITION INCOME	NO. CF SCHOOLS . 4
PER CENT GUARANTEEC LCAN AIG IS OF TOTAL AIC	NO. CF SCHOOLS . 6
CENT LOAN AID IS CF TCTAL AID	NO. CF SCHOOLS = 6
<	NO. CF SCHOOLS = 6
_	NO. CF SCHOOLS = 6
OF TOTAL AID	NO. OF SCHOOLS = 6
INSTITUTIONAL AIG PER STUDENT ON AIG 503	NO. CF SCHOOLS = 4
INSTITUTIONAL AID PER STUDENT	NO. OF SCHOOLS = 6
FECENAL AID PER STLDENT ON AID	NO. GF SCHOOLS = 5
TATE AID PER STUDENT CN AID	NO. OF SCHOOLS = 5
SCARANTE, LOAN AIC PER STUCENT ON AID	NO. CF SCHIJOLS = 5
TUTAL GIFT BIE PER STUDENT GM AID 259	NO. CF SCHOOLS = 4
TCTAL GIFT AIC PER STLDENT 69	NO. OF SCHOULS = 6
TETAL AIC PER STUCENT ON AID 1,599	NO. CF SCHOOLS . 4
TCTAL AID PER STUDENT	NO. GF SCHOOLS = 6
PER CENT TOTAL AIC IS OF TUITION INCOME	NO. OF SCHOOLS * 4
CENT UF PPESHEN E TRANSFER AID APPLICANTS AWARGEE AID 58	NO. CF SCHUDLS = 5

NO. CF SCHOOLS = 4	NO. OF SCHOOLS = 3	NO. OF SCHOOLS = 3	NG. CF SCHOOLS = 3	NG. OF SCHOOLS = 3	NO. CF SCHOOLS = 3	NO. CF SCHOOLS = 4	NO. OF SCHOOLS = 1	NO. CF SCHOOLS = 2	NO. CF SCHOOLS # 3	NO. CF SCHOOLS = 3	NO. OF SCHOOLS . 1	AO. CF SCHOOLS = 1	NO. CF SCHOOLS = 3
53	13	25	59	56	σ	83	15	35	91	75	176	115	e S
PER CENT FRESHAEN SPRIICINIS SEEKING AID	PER CENT TABASPEN APPLICANTS SEEKING AID	PER CENT MALE APPLICANTS SEEKING AID	PEP CENT FEMALE AVOLICANTS SEEKING AIG	PER CENT OF FRESHMEN STLUENTS UN AID	PER CENT OF TRANSFER STUDENTS ON AID	PER CENT OF OTHER UNCERCAPCLATES ON AID	PER CENT TOTAL CIFT AIG IS OF TUITION INCOME	FELERAL AID PER STUCENT ON AID	STATE ALC PER STUCENT ON ALC	GUARANTEEG LOIN AIC PER STUDENT UN AIO	TCTAL GIFT AIC PER STUDENT GN AID	TCIAL GIFT AIC PER STUCENT	PER CENT OF FRESHMEN & TRANSFER AID APPLICANTS AWARDEC AID

TOTAL NUMBER OF SCHOCLS = C6

PUBLIC SCUTTMESTERN SCHOOLS

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No. of Schools = 1	31C       31C       NO       CF       SCHOOLS         31C       46       NO       CF       SCHOOLS         31C       46       NO       CF       SCHOOLS         31C       47       NO       CF       SCHOOLS         31C       47       NO       CF       SCHOOLS         31C       34       NO       CF       SCHOOLS         31C       37       NO       CF       SCHOOLS         31       37       NO       CF <th>SPCELS TOTAL NUPBER OF SCHOCLS = 16  APPLICANTS SEEKING AID</th>	SPCELS TOTAL NUPBER OF SCHOCLS = 16  APPLICANTS SEEKING AID
CV   1C	C   1   C   2   C   C   C   C   C   C   C   C	AIC
Ch AIC	CA AIC   CA AIC   CA SCHOOLS   CA AIC   CA AIC   CA CACOLS   CA AIC   CA AIC   CA CACOLS   CA AIC   CA CACOLS   CACOCACS   CACOCACACACACACACACACACACACACACACACACAC	EKING AIC
15 CN AID	15 CN AID	Ch AIC
	CF   AID	ટ
15 TOTAL AID	DF TOTAL AID	TGTAL AID
TUITIGN INCOPE   1	TUITIGN INCOPE	OF TOTAL ATO
1D        21       NO. CF SCHOOLS         1D        21       NO. CF SCHOOLS         D        10       NO. CF SCHOOLS         L AID        11       NO. CF SCHOOLS         AID        1       NO. CF SCHOOLS         Y AID        594       NO. CF SCHOOLS           377       NO. CF SCHOOLS <td>  CF   TCTAL AIG  </td> <td>TUITION INCOME</td>	CF   TCTAL AIG	TUITION INCOME
10	D	S CF TCTAL A
D · · · · · · · · · · · · · · · · · · ·	D	•
A1D	A1D	
VAID        1,334       NO. CF SCHOOLS          594       NO. CF SCHOOLS          377       NO. CF SCHOOLS          88       NO. CF SCHOOLS         Ch AID        133       NO. CF SCHOOLS         10        1,213       NO. OF SCHOOLS          539       NO. OF SCHOOLS          1,868       NO. OF SCHOOLS           1,868       NO. OF SCHOOLS	NAID       594       NO. CF SCHOOLS         NO. CF SCHOOLS       377       NO. CF SCHOOLS         CA AID       88       NO. CF SCHOOLS         ID       133       NO. CF SCHOOLS         ID       1,213       NO. OF SCHOOLS         ID       539       NO. OF SCHOOLS         ID       539       NO. OF SCHOOLS         ID       1,868       NO. OF SCHOOLS         INCOME       36       NO. CF SCHOOLS	AID
Ch AID	Ch AID	0 A A I C
Ch AID	Ch AID	
CA AID	CA ALD	
Ch AID	Ch AID        133       NO. CF         1D        1,213       NO. OF           539       NO. OF           1,868       NO. OF	•
A10		Ch A10
		A10
		568
NO. GF		
	36 NO. CF	

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PER CENT PRESPUEN SPOLICANTS SEEKING ALD	NO. CF SCHOOLS = 5
PEN CENT TARISFER APPLICANTS SEEKING AID 23	NO. CF SCHOOLS = 5
PER CENT MALE APPLICANTS SEEKING AIC	AO. OF SCHOOLS = 5
DES CENT FEMALE APPLICANTS SEEKING AID 30	NO. CF SCHOOLS = 5
PER CENT OF FRESHMEN STLUENTS ON AIC	NO. OF SCHOOLS = 5
PER CENT OF TRANSFER STUDENTS ON AÎD 18	NO. CF SCHOOLS = 5
PER CENT OF UTHER UNCERGRACUATES ON AID	NG. CF SCHOOLS = 5
PEK CENT TCTAL GIFT AIG IS CF TOTAL AID	NO. CF SCHOOLS = 4
PER CENT TOTAL CIFT AIG IS CF TLITICN INCOME 62	NO. GF SCHOOLS = 2
PER CENT INSTITUTIONAL AID IS OF TOTAL AID	NO. DF SCHOOLS = 4
PER CENT INSTITUTIONAL AIG IS OF TUITION INCOPE 29	NO. OF SCHOOLS = 2
PER CENT GUARANTEEC LCAN AIG IS CF TOTAL AID 16	NO. CF SCHOOLS = 4
PER CENT LCAN AIC IS CF TCTAL AID	NO. DF SCHOOLS = 4
PER CENT JOE AIC IS CF TOTAL AID 19	NO. CF SCHOOLS = 4
PER CENT FECERAL AIC IS OF TOTAL AIG 58	NO. OF SCHOOLS = 4
PER CENT STATE AIC IS OF TOTAL AID	NO. CF SCHOOLS = 4
INSTITUTIONAL AIC PER STUDENT ON AIG 266	NO. CF SCHOOLS = 4
INSTITUTIONAL AIC PER STUCENT 143	ND . CF SCHUOLS = 4
FECERAL AIG PER STUDENT ON AID 618	AO. GF SCHOOLS = 4
STATE ALD PER STUCENT UN AID	NO. OF SCHOOLS - 4
GUARANTEED LUAN AIC PER STUFFNT ON AID	NO. CF SCHOOLS - 4
TCTAL GIFT AIC PER STUDENT CN AID	NO. CF SCHUOLS . 4
TCTAL GIFT AIC PER STUDENT 264	NO. OF SCHOOLS = 4
TCTAL AIG PEK STUCENT CN AID 1,064	NO. OF SCHOOLS = 4
TOTAL AIG PER STUCENT 573	NO. CF SCHOOLS = 4
PER CENT TOTAL AIC IS UF TUITION INCOME	NO. CF SCHOOLS = 2
PEP CENT OF FPFS+MEN & TRANSFER A1D APPLICANTS AWARDED AID 53	NO. OF SCHOOLS = 5

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TOTAL NUMBER OF SCHOCLS = 05

PRIVATE SCUTFERN SCHCCLS

PRIVATE MIGWESTERN SCHECLS TOTAL NUMBER OF SCHOCLS = C7	
PER CENT FRESPYEN APPLICANTS SEEKING ATO	NO. CF SCHOOLS = 7
PER CENT TABLEFER APPLICANTS SEEKING AID	STOCKUOI S
PER CENT WALE APPLICANTS SEEKINS AIC	ט ט
PER CENT FEMALE APPLICANTS SEEKING ATD 62	T.
PER CENT OF FRESHMEN STUDENTS ON DIO 50	
PER CENT OF TRANSFER STUDENTS ON AIC	n.
PER CENT OF OTHER UNCERGRADULTES ON AID	
PER CENT TOTAL CIFT AIL IS CF TOTAL AID	, L
PER CENT TOTAL GIFT AIG IS CF TLITICN INCIME	NO. OF SCHOOLS = 4
PER CENT INSTITUTIONAL AIC IS OF TOTAL AIC	NO. CF SCHOOLS
PER CENT GUARANTEEC LCAN AIC IS CF TOTAL AID 13	
PER CENT LCAN AID IS CF TCTAL AID	. A
PER CENT JOR AIC IS OF TOTAL AID	5
PER CENT FECERAL AIC IS CF TOTAL AIO 76	NO. CF SCHOOLS # 1
PER CENT STATE AIG IS OF TOTAL AIO	NO. CF SCHOOLS . 1
INSTITUTIONAL AID PER STUDENT ON AIC 1C6	NO. CF SCHOOLS = 1
INSTITUTIONAL AIC PER STUDENT	NO. OF SCHOOLS = 1
FECERAL AID PER STUCENT ON AID 593	NO. OF SCHOOLS . 5
STATE AIG PER STUCENT ON AIG	NO. CF SCHOOLS = 5
GUARANTEŁC LO£N AIC PER STUCENT ON AIG 232	NO. CF SCHOOLS = 5
TCTAL GIFT AIC PER STUDENT ON AID 771	NÓ. OF SCHOOLS = 5
TCTAL GIFT AIC PER STUDENT 383	NO. CF SCHOOLS . 5
TOTAL AIC PER STUCENT ON AID 1,710	NO. OF SCHOOLS = 1
TOTAL AIC PER STUCENT	NO. CF SCHOOLS = 1
PER CENT OF FRESHMEN & TRANSFER AID APPLICANTS AWARDED AID 62	NO. OF SCHOOLS = 6

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THINKSTERN SCHOOLS TOTAL NUMBER OF SCHOOLS - 12	
+T = 6370;;;	
	NO. CF SCHOOLS # 1
TOWN OFFICE AND ADD	NO. CF SCHOOLS = 1
APPLICANTS SERVICES	NO. CF SCHOOLS = 1
	NO. CF SCHOOLS = 1
EN STUDENTS CA	NO. OF SCHOOLS # 14
Tes Gu	NO. CF SCHOOLS = 12
[At A 10	NO. CF SCHOOLS = 14
141716	NO. CF SCHGOLS = 7
PER CENT INSTITUTIONAL AID IS OF TOTAL AID	NO. CF SCHOOLS = 6
OF THITTE	NO. OF SCHOOLS = 7
A AIC IS O	NC. OF SCHOOLS = 5
CTAL AID	NO. CF SCHOOLS = 7
IS CF TOTAL A	NO. CF SCHOOLS = 7
C 15 3F 10	NO. CF SCHOOLS = 7
IS OF TOTAL AT	NO. CF SCHOOLS = 7
ER STUBENT O	NO. OF SCHOOLS = 7
ER STUCENT	NO. CF SCHOOLS = 7
	NO. OF SCHOOLS # 7
STATE AIC PER STUCENT ON AID	NO. CF SCHOOLS = 10
GUAPANTEED LOAN AIC PER STUCENT ON AID	NO. CF SCHOOLS = 12
	NO. CF SCHOOLS = 11
STUDENT	AO. OF SCHOOLS . 8
	NO. CF SCHOOLS = 8
	NO. OF SCHOCLS = 7
PER CENT TOTAL AIC IS OF TUITION INCOME.	NO. CF SCHOOLS = 7
TRANSFER ALD APPLICANTS ALABORE	NO. CF SCHOOLS = 5
	NO. OF SCHOOLS = 12

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PRIVATE SOUTHWESTERN SCHOOLS TOTAL NUMBER OF SCHOOLS = C2	
•	S CONTRACTOR
PER CENT TAXISFEP APPLICANTS SEENING AID	5 8
PER CENT ARLE APPLICANTS SERVING AID	בי ל
PEP CENT FEWALE APPLICANTS SEEKING AID	ב
TA AID A TO A T	9
PER CENT OF TRANSFER STUDENTS ON AID	<b>5</b> 5
PER CENT OF OTHER UNCENGRACUATES CN AID	ב
At AID	F
PER CENT TOTAL CIFT AIC IS OF TUITION INCOME.	• 0
	<b>5</b>
	<u> </u>
AIC 1S C	NO. OF SCHOOLS = 1
7	NO. CF SCHOOLS = 2
יכישן.	NO. CF SCHOOLS = 2
910	NO. CF SCHOOLS = 2
CENT STATE ATT TO DE TOTAL	NO. OF SCHOOLS = 2
IOTAL	NO. OF SCHUOLS = 2
TASTITUTIONAL ALD PER STUDENT ON ALD	NO. OF SCHOULS . 1
AIC PER STUDE	NO. CF SCHOOLS . 2
NIATE ATO DES CHICKES OF THE STATE ATO SECURE ATO DES CHICKES OF THE STATE ATO DESCRIPTION OF THE STATE	NO. GF SCHOOLS = 2
A16	NO. OF SCHOOLS = 1
TUDE	NO. CF SCHOOLS = 1
TOTAL CIFT ALC PER STUDENT ON AID 1,244	NO. OF SCHOOLS . 1
GAT! ALL FER STUDEN	NO. CF SCHOOLS = 2
TOTAL AND DESCRIPTION AND	NO. OF SCHOOLS . 1
ATO PER SIDEENT .	NO. OF SCHOOLS = 2
CENT OF EDICEMENT STATEMENT OF THE STATE	NO. CF SCHOOLS # 1
THE STATE OF THE STATE AND APPLICANTS ANARGED AID 94	NO. OF SCHOOLS = 1

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#### DEFINITIONS OF INDEPENDENT VARIABLES

This appendix contains summary data for the multiple regressions for each of 22 dependent variables in the institutional data. The independent variables used in these regressions were:

- I Control (0 = Private; 1 = Public)
- Average Parental Assets of students filing a Parents' Confidential Statement (00's)
- III Tuition (00's)
- IV Ability (Average SAT score)
- V Per Capita Gift Aid
- VI Total Gift Aid divided by Tuition
- VII Revenue per Student (000's)
- VIII Regional Location (East is control, add VIIIA for Southwest, VIIIB for West, VIIIC for Midwest, VIIID for South)
  - IX Unused Capacity (0s no; 1s yes)
  - X Race (% Negro)

For each dependent variable and each independent variable used in the regression, presented are the regression coefficient, its standard error, the F value of the marginal contribution, and the simple correlation with the dependent variable. Also reported are the number of institutions included in the regression, the F level of the overall regression with its significance level, and R<sup>2</sup>, the percentage of the variation of the dependent variable explained by the regression. The regression program was taken from the Stanford Statistics Package for the Social Sciences. The last table in this appendix is a correlation matrix for the independent variables.



### REGRESSION EQUATIONS FROM INSTITUTIONAL DATA

TABLE A1 - PERCENTAGE OF FRESHMEN APPLICANTS SEEKING AID

Variable	Regression Coefficient	Standard	Error	F	Simple R
I	- 7.52	9.16		0.67	-0.47
III	- 0.06	0.49		0.02	0.27
V	0.02	0.02		1.86	0.51
X	0.33	0.12		7.23***	0.53
N = 42 Constant	± = 28.06	F = (	6.96 (.( ).43	01)	

# TABLE A2 - PERCENTAGE OF TRANSFER APPLICANTS SEEKING AID

Regression Coefficient	Standard	Error	F	Simple R
- 6.44	10.10		0.41	-0.38
0.04	0.54			0.21
0.01				0.39
0.31	0.14		5.24**	0.46
<b>-</b> 15.53	F = 3	3.89 (.0	025)	
•	- 6.44 0.04 0.01	- 6.44 10.10 0.04 0.54 0.01 0.02 0.31 0.14	- 6.44 10.10 0.04 0.54 0.01 0.02 0.31 0.14	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$

# TABLE B1 - PERCENTAGE OF FRESHMEN STUDENTS ON AID

Variable	Regression Coefficient	Standard Error	F	Simple R
I	- 3.46	9.60	0.13	-0.49
V	0.02	0.02	1.70	0.61
VI	0.00	0.00	1.33	-0.04
VII	0.71	0.76	0.88	0.42
<b>X</b>	0.23	0.08	8.39***	0.42
N = 25 Constant	= 27.82	$F = 5.31 (R^2 = 0.58)$	.01)	



TABLE B2 - PERCENTAGE OF TRANSFER STUDENTS ON AID

Variable	Regression Coefficient	Standard	Error	F	Simple R
I	- 1.57	10.73		0.02	-0.39
V	0.03	0.02		4.20**	0.54
VI	0.00	0.00		5.34**	0.18
X 	0.12	0.09		1.82	0.20
N = 25 Constant	- 7.30	F = 4 R <sup>2</sup> = 0	.42 (.0	)25)	
Constant		$R^2 = 0$	. 47		

TABLE B3 - PERCENTAGE OF ALL OTHER UNDERGRADUATE STUDENTS ON AID

Variable	Regression Coefficient	Standard	Error	F	Simple R
I V VI X	- 7.72 0.02 0.00 0.40	10.86 0.02 0.00 0.09		0.51 2.13 0.16 20.23***	-0.48 0.53 -0.22 0.63
N = 25 Constant	= 30.01	F = 9.09 (.01) R <sup>2</sup> = 0.65			

TABLE C1 - GIFT AID PER STUDENT ON AID

Variable	Regression Coefficient	Standard Error	F	Simple R
I	85.91	411.8?	0.04	-0.78
II	- 8.36	4.03	4.31**	0.60
III	59.75	28.65	4.35**	0.88
IV	2.31	1.57	2.16	0.67
VII	6.01	33.69	0.03	0.56
VIIIA	129.84	413.75	0.10	0.17
VIIIB	439.86	248.48	3.13 *	0.32
VIIIC	-22.40	336.59	0.00	-0.39
VIIID	115.51	391.56	0.09	-0.38
N = 19	1005	F = 6.43 (.	01)	
Constant = -1295.16		$R^2 = 0.87$		

TABLE C2 = GIFT AID PER ENROLLED STUDENT

Variable	Regression Coefficient	Standard Error	F	Simple R
I III IV VII VIIIA VIIIC VIIIC	-396.36 - 2.44 - 1.61 0.91 9.91 188.83 95.52 32.69 135.74	136.85 1.34 9.52 0.52 12.19 137.49 82.57 111.85 130.12	8.39*** 3.33* 0.03 3.04* 0.66 1.89 1.34 0.09 1.09	-0.89 0.42 0.76 0.51 0.55 0.39 0.19 -0.42 -0.18
N = 19 Constant	<b>-</b> -175.01	F = 9.99 (.0 R <sup>2</sup> = 0.91	01)	

TABLE C3 - GIFT AID AS A PERCENTAGE OF TOTAL AID

Variable	Regression Coefficient	Standard Error	P	Simple R
I III IV VIIIA VIIIA VIIIC VIIIC	- 9.95 - 0.26 1.30 0.10 0.58 25.02 13.82 3.56 17.47	11.67 0.11 0.81 0.04 1.04 11.73 7.04 9.54	0.73 5.35** 2.56 4.68** 0.31 4.55** 3.85** 0.14 2.48	-0.83 0.55 0.84 0.64 0.59 0.41 0.21 -0.43 -0.26
N = 19 Constant	<b>-</b> -37.30	F = 11.64 (. R <sup>2</sup> = 0.92	01)	

TABLE C4 - GIFT AID AS A PERCENTAGE OF TUITION INCOME

Variable	Regression Coefficient	Standard Error	F	Simple R
I	- 9.09	11.53	0.62	-0.30
II	- 0.23	0.14	2.93**	-0.44
III	- 0.39	0.84	0.21	-0.05
IV	0.06	0.05	1.21	-0.30
VII	0.42	1.45	0.09	0.01
VIILA	35.52	11.64	9.31***	0.44
VIIIB	9.20	6.70	1.89	-0.12
VIIIC	- 9.67	9.71	0.99	-0.39
VIIID	0.74	11.05	0.00	0.44
<b>X</b>	0.27	0.23	1.45	0.71
N = 19 Constant = 4.64		F = 6.84 (.01) R <sup>2</sup> = 0.90		
Constant	- 4.04	R~ = 0.90		

TABLE C5 - LOAN AID AS A PERCENTAGE OF TOTAL AID

Variable	Regression Coefficient	Standard Error	F	Simple R
I	-10.68	12.60	0.72	0.62
. II	0.20	0.12	2.52	-0.32
III	- 2.07	0.88	5.59**	-0.67
IV	- 0.04	0.05	0.67	-0.39
VII	- 0.77	1.12	0.47	-0.41
VIILA	-25.72	12.66	4.13**	-0.35
VIIIB	-14.03	7.60	3.40*	-0.11
VIIIC	-19.32	10.30	3.52*	0.13
VIIID	-19.19	11.98	2.57	0.07
N = 19 Constant	± = 88.38	F = 3.47 (.0 R <sup>2</sup> = 0.78	)25)	

TABLE C6 = JOB AID AS A PERCENTAGE OF TOTAL AID

Variable	Regression Coefficient	Standard Error	F	Simple R
I	21.33	11.67	3.34*	0.70
II	0.06	0.11	0.31	-0.57
III	0.84	0.81	1.08	-0.68
IV	- 0.06	0.04	1.59	-0.65
VII	0.20	1.04	0.04	-0.5 <i>!</i>
VIIIA	0.61	11.72	0.00	-0.51
VIIIB	0.46	7.04	0.00	-0.23
VIIIC	16.24	9.54	2.90*	0.57
VIIID	1.48	11.10	0.02	0.36
N = 19 Constant	: <b>=</b> 47.88	$F = 3.74$ (.0 $R^2 = 0.79$	)5)	

TABLE D1 - INSTITUTIONAL AID PER STUDENT ON AID

Variable	Regression Coefficient	Stundard Error	F	Simple R
I	252.49	372.82	0.46	-0.42
II	0.21	4.29	0.00	0.69
III	49.04	24.30	4.07**	0.71
IV	1.93	0.99	3.84 *	0.67
V	- 0.74	0.84	0.78	0.45
AIIIA	584.31	689.61	0.72	0.18
VIIIB	155.75	280.45	0.31	0.21
VIIIC	303.08	310.35	0.95	1.20
VIIID	371.97	354.26	1.10	-0.43
IX	2.35	231.63	0.00	-0.33
X	6.10	5.59	1.19	-0.31
N = 28 Constant	2120.05	F = 3.23 (.0	)25)	
Constant	= -2138.25	$R^2 = 0.69$		

TABLE D2 - INSTITUTIONAL AID PER ENROLLED STUDENT

Variable	Regression Coefficient	Standard Error	F	Simple R
I IV VIIIA VIIIC VIIID IX	-182.29 0.89 0.37 217.50 -93.32 43.35 85.44 -29.40	59.88 0.82 0.28 154.34 75.70 102.44 114.10 78.88	9.27*** 1.18 1.76 1.99 1.52 0.18 0.56 0.14	-0.61 0.60 0.65 0.42 0.06 -0.23 -0.31
N = 28		F = 5.55 (.0 R <sup>2</sup> = 0.70	01)	

TABLE D3 - INSTITUTIONAL AID AS A PERCENTAGE OF TOTAL AID

Variable	Regression Coefficient	Standard Error	F	Simple R
I II IV VIIIA VIIIC VIIID IX	- 5.39 0.20 0.05 21.54 - 9.73 28.57 21.87 1.61	8.33 0.11 0.04 21.46 10.53 14.24 15.86 10.97	0.42 3.11* 1.60 1.01 0.85 4.02** 1.90 0.02	-0.29 0.57 0.57 0.35 0.00 0.04 -0.31 -0.25
N = 28 Constant	-	$F = 3.33$ (.0 $R^2 = 0.56$	)25)	

TABLE D4 - FEDERAL AID PER STUDENT ON AID

Variable	Regression Coefficient	Standard Error	F	Simple R
I	-78.63	216.51	0.13	-0.11
II	- 2.52	2.49	1.03	
III	- 4.36	14.11	0.10	-0.46 -0.20
IA	- 0.09	0.57	0.03	-0.33
V	0.29	0.49	0.36	0.16
VIIIA	-322.70	400.48	0.65	-0.17
VIIIB	179.22	162.87	1.21	0.15
VIIIC	-96.85	180.23	0.29	0.08
VIIID	-116.23	205.73	0.32	0.15
IX	-151.86	134.51	1.28	-0.10
	1.73	3.25	0.28	0.60
N = 28		F = 2.18 (.	10)	<del>-</del>
Constant	= 916.57	$R^2 = 0.60$	10)	

TABLE D5 - FEDERAL AID AS A PERCENTAGE OF TOTAL AID

Variable	Regression Coefficient	Standard Error	F	Simple R
<b>I</b> .	-20.42	8.19	6.22**	0.16
II	- 0.23	0.09	5.81**	-0.84
III	- 0.78	0.53	2.12	-0.62
IV	- 0.03	0.02	1.57	-0.70
<b>V</b>	- 0.01	0.02	0.24	-0.24
VIIIA	- 2.42	15.15	0.03	-0.20
VIIIB	4.61	6.16	0.56	-0.17
VIIIC	-11.85	6.82	3.02*	0.14
VIIID	- 4.39	7.78	0.32	0.50
IX	-14.73	5.09	8.38***	0.16
X	- 0.05	0.12	0.14	0.62
N = 28 Constant	= 124.44	F = 11.12 (. R <sup>2</sup> = 0.88	.01)	

TABLE D6 - STATE AID PER STUDENT ON AID

Variable	Regression Coefficient	Standard Error	F	Simple R	
I	175.82	176.09	1.00	-0.34	
II	0.29	2.02	0.02	0.50	
III	5.75	11.48	0.25	0.51	
IV	- 0.44	0.47	3.0	0.32	
V	0.70	0.39	3.13*	0.33	
VIIIA	-511.30	325.73	2.46	-0.12	
VIIIB	198.01	132.47	2.23	0.52	
VIIIC	-27.82	146.59	0.94	-0.23	
VIIID	-156.91	167.33	0.88	-0.31	
IX	175.06	109.41	2.56	-0.02	
<b>X</b>	- 2.88	2.64	1.19	-0.23	
N = 28		F = 2.37 (.1	 10)		
Constant	= 168.34	$R^2 = 0.62$	,		

TABLE D7 = STATE AID AS A PERCENTAGE OF TOTAL AID

Variable	Regression Coefficient	Standard Error	F	Simple R
I	6.15	10.15	0.37	-0.27
II	- 0.02	0.12	0.02	0.41
III	0.02	0.66	0.00	0.38
IV	- 0.01	0.03	0.12	0.31
V	0.03	0.02	2.28	0.25
VIIIA	<b>-28.</b> 17	18.77	2.25	-0.14
VIIIB	7.07	7.64	0.86	0.42
VIIIC	- 3.81	8.45	0.20	-0.25
VIIID	- 8.16	9.64	0.72	-0.24
IX	9.74	6.31	2.38	0.03
X	- 0.17	0.15	1.29	-0.25
N = 28 Constant	: = 6.37	F = 1.29 (no R <sup>2</sup> = 0.47	ot signif.	.)

TABLE D8 - GUARANTEED LOAN AID PER STUDENT ON AID

Variable	Regression Coefficient	Standard Error	F	Simple R
I	142.25	162.14	0.77	0.16
II	0.80	1.86	0.19	0.17
III	10.55	10.57	1.00	0.17
IV	- 0.82	0.43	3.63*	-0.11
V	- 0.15	0.36	0.18	-0.26
VIIIA	24.07	299.92	0.01	-0.19
VIIIB	- 9.27	121.97	0.01	0.08
VIIIC	-225.56	134.98	2.79*	<b>-0.17</b>
VIIID	-247.19	154.07	2.57	-0.15
IX	21.25	100.74	0.04	0.10
<b>X</b>	- 0.33	2.43	0.02	-0.17
N = 28 Constant = 940.52		F = 1.58 (not signif.) $R^2 = 0.52$		

TABLE D9 - GUARANTEED LOAN AID AS A PERCENTAGE OF TOTAL AID

Variable	Regression Coefficient	Standard Error	P	Simple R
I	7.67	10.88	0.50	0.51
II	0.10	0.13	0.61	-0.13
III	- 0.59	0.71	0.70	-0.15
IV	- 0.06	0.03	4.19**	-0.27
V	0.01	0.02	0.16	-0.54
VIIIA	-15.41	20.12	0.59	-0.21
VIIIB	-10.18	8.18	1.55	-0.11
VIIIC	-20.16	9.05	4.96**	-0.07
VIIID	-18.47	10.33	3.19*	0.04
IX	1.53	6.76	0.05	0.19
X	- 0.11	0.16	0.44	-0.16
N = 28 Constant	= 77.14	F = 1.68 (no	et signif.)	

TABLE E1 - AVERAGE TOTAL AID PER STUDENT ON AID

Variable	Regression Coefficient	Standard Error	F	Simple R
I	377.46	389.91	0.94	-0.44
III	52.40	20.82	6.34**	0.71
IV	0.77	1.23	0.39	0.51
VII	-12.60	56.00	0.05	0.40
VIIIA	-369.46	597.27	0.38	-0.03
VIIIB	346.68	298.04	1.35	0.40
VIIIC	-186.41	428.00	0.19	-0.28
VIIID	-241.94	464.82	0.27	-0.48
X 	6.29	4.72	1.77	-0.15
N = 26 Constant	= -143.49	F = 3.55 (.0 R <sup>2</sup> = 0.67	025)	

TABLE B2 - AVERAGE TOTAL AID PER ENROLLED STUDENT

Variable	Regression Coefficient	Standard Error	P	Simple R
I	-319.16	143.42	4.95**	-0.72
III	3.40	7.66	0.20	0.51
IV	0.78	0.45	3.00*	0.16
VII	-13.42	20.60	0.42	0.23
VIIIA	30.24	219.69	0.02	0.14
VIIIB	<b>38.</b> 52	109.63	0.12	0.09
VIIIC	128.01	157.43	0.66	-0.05
VIIID	-29.94	170.97	0.03	-0.13
X	7.07	1.74	16.57***	0.45
N = 26		F = 6.73 (.	01)	
Constant	= -226.75	$R^2 = 0.79$		

# CORRELATION MATRIX OF INDEPENDENT VARIABLES

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×													1.00000
Ħ												1.00000	0.18573
VIIID											1.00000	0.27941	
VIIIC								, 44		1.00000	-0.18926	0.21220	0.01743
VIIIB									1.00000	0.32512	0.22904 -	0.12676	0.18666 -
VIIIA								1.00000	0.08364 -0.20218	0.14915 -0.14313 -0.16707 -0.32512	0.03017 -0.43911 -0.18048 -0.42447 -0.03372 -0.10352 -0.14119 -0.11770 -0.22904 -0.18926	-0.05614 -0.19614 -0.08255 -0.39861 -0.13042 -0.13736 -0.18097 -0.09202 -0.12676	-0.06964 -0.64285 -0.16630 -0.49932 0.21135 -0.12834 -0.13635 -0.09064 -0.18666 -0.01743 0.47152
VII							1.00000	0.08589 -0.11246 1.00000	0.08364	-0.14313	-0.14119 -	-0.18097	-0.13635 -
VI						1.00000	0.04454 1.00000	0.08589	0.04792	0.14915	-0.10352	-0.13736	0.12834 -
<b>&gt;</b>					1.00000	0.03045 -0.25559 1.00000	0.57912	0.15198	0.08432	-0.13149	-0.03372	-0.13042	0.21135
AI				0.60064 1.00000	0.49129	0.03045	0.64884	0.18835 -0.24549 -0.21443 -0.12141	0.17888	-0.15222	-0.42447	-0.39861	-0.49932
III			1.00000	0.60064	0.70358	-0.35691	0.44761	-0.21443	0.44283 0.05945 0.17888	-0.10189	-0.18048	0.08255	0.16630 -
II		1.00000	0.62891	0.73825	0.33304	0.40967 -0.05028 -0.35691	0.41018	-0.24549	0.44283	. 0.03973	0.43911	0.19614 -	0.64285 -
H	1.00000	-0.41430 1.00000	-0.77675 0.62891	-0.35645	-0.69596 0.33304 0.70358	0.40967	VII -0.31632 0.41018 0.44761	0.18835	WIIIB -0.15796	WILIC 0.10062 -0.03973 -0.10189 -0.15222 -0.13149	0.03017	0.05614 -	0.06964 -
	H	II	111	À	>	AI	VII	VIIIA	WIIB .	VIIIC	VIIID	<u> </u>	×

Appendix L

The Individual Regression Equations

#### INSTITUTION I

TABLE 1: Probability of Admission (Total population)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Race SAT GPA Fin. Need	0.34 0.0004 0.002 -0.00005	0.07 0.00 0.00 0.00	23.03*** 7.30*** 9.02*** 8.20***	0.07 0.09
N = 475 Constan	5 nt = -0.79	$F = 14.54$ $R^2 = 0.11$		

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
SAT GPA Fin. Need Race	0.02 0.15 -0.03 25.47	0.03 0.13 0.00 9.79	0.42 1.25 109.79*** 6.77***	0.00
N = 217 Constant	77.12	$R^2 = 32.51$ $R^2 = 0.38$		

TABLE 3 : Percentage of Grant Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
SAT GPA Fin. Need Race	-0.001 0.0001 0.002 10.94	0.01 0.06 0.00 3.57	0.00 0.00 1.22 9.40***	0.04 0.04 0.05 0.12
N = 120 Constant	<b>= 82.76</b>	F = 4.02 R 2 = 0.12		

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	F (	Cumulative R Square
SAT GPA Fin. Need Race	0.00005 0.01 -0.003 -7.48	0.01 0.04 0.00 2.83	0.00 0.04 4.89** 7.01***	0.04 0.04 0.09 0.14
N = 120 Constan	t = 14.27	$F = 4.72$ $R^2 = 0.14$		

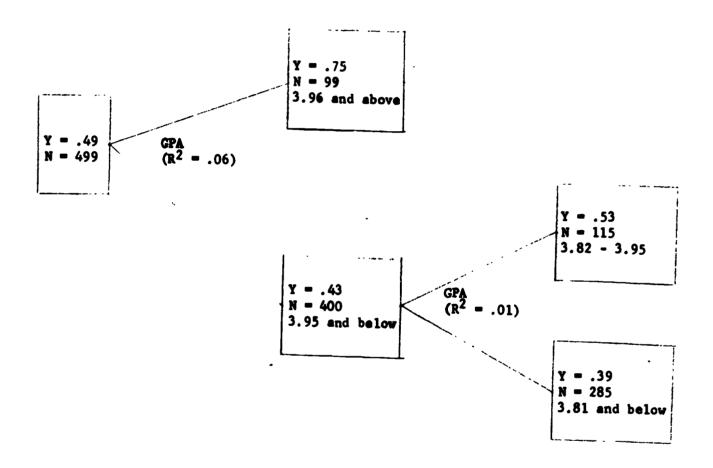
TABLE 5 : Percentage of Job Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
SAT GPA Fin. Need Race	0.0009 -0.01 0.001 -3.47	0.00 0.02 0.00 1.53	0.03 0.15 2.27 5.13**	0.00 0.00 0.02 0.06
N = 120 Constan	t = 2.98	F = 1.85 R <sup>2</sup> = 0.06		

TABLE 6: AID Tree

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Y Proportion of group admitted  $R^2 = .07$ 



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### INSTITUTION II

TABLE la : Probability of Admission (Total Population)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need SAT GPA	-0.00007 0.0009 0.003	0.00 0.00 0.00	6.04** 44.32*** 52.22***	~ · · · · ·
N = 22 Consta	22 ont = -1.18	$R^2 = 101.83$		

TABLE 15: Probability of Admission (GPA less than 2.89)

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
Fin. Need SAT GPA	-0.0002 0.0005 -0.0002	0.00 0.00 0.00	8.61*** 9.00*** 0.05	V
N = 1 Const.	11 ant = 0.30	F = 7.78 R <sup>2</sup> = 0.18		

TABLE 1c : Probability of Admission (GPA greater than 2.90)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need SAT GPA	-0.00002 0.001 0.0009	0.00 0.00 0.00	0.49 22.95*** 0.93	0.06 0.27 0.28
N = 1: Consta		$F = 13.57$ $R^2 = 0.28$		

# INSTITUTION II (cont.)

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
SAT GPA Fin. Need	0.004 0.08 -0.02	0.03 0.06 0.00	0.02 1.64 25.26***	0.02 0.06
N = 10 Consta	or ant = 46.82	F = 11.17 R <sup>2</sup> = 0.25		

TABLE 3 : Percentage of Grant Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
SAT GPA Fin. Need	0.03 -0.03 0.01	0.05 0.07 0.01	0.39 0.21 0.90	0.00 0.01 0.03
N = 4	4 ant = 32.68	$F = 0.40$ $R^2 = 0.03$		

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
SAT GPA Fin. Need	-0.03 0.03 -0.01	0.04 0.06 0.01	0.44 0.35 1.26	0.00 0.01 0.04
N = 44 Consta	int = 59.31	F = 0.57 R <sup>2</sup> = 0.04		

# INSTITUTION II (cont.)

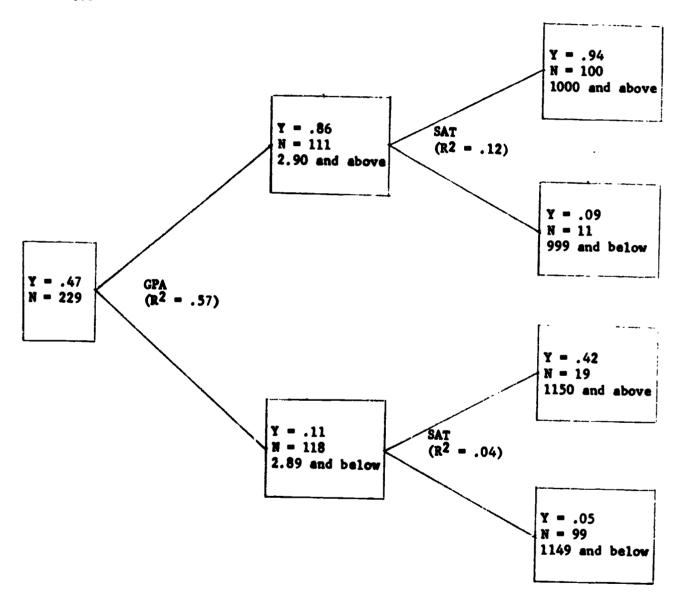
TABLE 5 : Percentage of Job Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
SAT GPA Fin. Need	-0.003 -0.003 0.00004	0.02 0.02 0.00	0.04 0.02 0.00	0.00 0.00 0.00
N = 44 Const	4 ant = 8.00	$F = 0.03$ $R^2 = 0.00$		



TABLE 6: AID Tree

 $Y = Proportion of group admitted <math>R^2 = .73$ 



#### INSTITUTION III

TABLE 1a : Probability of Admission (Total Population)

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Variable	Regression Coefficient	Stendard Error	F	Cumulative R Square
Fin. Need	-0.00002	0.00	2.26	0.02
SAT	0.001	0.00	76.41***	0.13
GPA	0.002	0.00	9.52***	0.14
N - 8	38	F = 45.95 $R^2 = 0.14$		
Const	ant = -1.65	$R^2 = 0.14$		

TABLE 1b : Probability of Admission (SAT less than 1349)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need SAT GPA	-0.00001 0.0003 0.0005	0.00 0.00 0.00	0.73 6.98*** 0.43	0.00 0.02 0.03
N = 3 Const	86 ant = -0.47	F = 3.43 R <sup>2</sup> = 0.03	_	

TABLE 1c : Probability of Admission (SAT greater than 1350 and GPA less than 3.73)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need SAT	-0.00001 0.0006	0.00 0.00	0.30	0.00 0.01
GPA	0.001	0.00	0.72	0.01
N = 28 Consta	80 ant = -0.89	F = 1.06 $R^2 = 0.01$		

#### INSTITUTION III (cont.)

TABLE 1d: Probability of Admission (SAT greater than 1350 and GPA greater than 3.74)

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
Fin. Need SAT GPA	-0.00001 0.0008 -0.004	0.00 0.00 0.01	0.19 2.02 0.20	0.00 0.01 0.01
N = 1	72 ant = 1.15	F = 0.83 R <sup>2</sup> = 0.01		

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
SAT GPA Fin. Need	-0.09 0.29 -0.03	0.02 0.12 0.00	19.73*** 6.23** 233.99***	0.07
N = 2 Const	95 ant = 164.54	F = 91.81 R <sup>2</sup> = 0.49		

TABLE 3 : Percentage of Grant Aid

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
SAT CPA Fin. Need	0.005 -0.02 0.01	0.01 0.07 0.00	0.26 0.05 95.65***	0.02 0.02 0.33
N = 2: Const	10 ant = 40.45	F = 33.85 R <sup>2</sup> = 0.33		

#### INSTITUTION III (cont.)

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
SAT GPA Fin. Need	0.01 -0.06 -0.01	0.01 0.08 0.00	1.10 0.48 28.96***	0.02 0.03 0.15
N = 21 Consta	0 nt = 42.73	• 4F = 11.71 R <sup>2</sup> = 0.15		

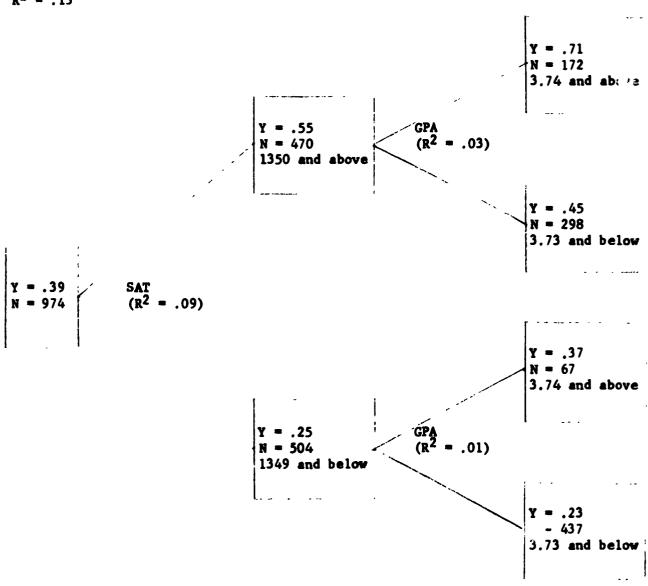
TABLE 5 : Percentage of Job Aid

Variable	"egression Coefficient	Standard Error	P	Cumulative R Square
SAT GPA Fin. Need	-0.02 0.07 -0.005	0.01 0.07 0.00	3.70 1.32 16.29***	0.00 0.01 0.08
N = 21( Constan	0 nt = 16.82	F = 6.03 R <sup>2</sup> = 0.08		



TABLE 6: AID Tree

Y = Proportion of group admitted  $R^2 = .13$ 



#### INSTITUTION IV

TABLE la : Probability of Admission (Total Population)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Rank SAT Fin. Need	-0.76 0.001 -0.00002	0.07 0.00 0.00	114.53*** 133.52*** 0.87	0.32
N = 431 Constan	at = -0.32	F = 139.27 R <sup>2</sup> = 0.49		

TABLE 1b : Probability of Admission (SAT less than 999)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Rank SAT Fin. Need	-0.48 0.0005 0.00000	0.11 0.00 0.00	20.35*** 3.11* 0.00	0.13 0.15 0.15
N = 142 Constan	t = -0.09	$R^2 = 8.14$ $R^2 = 0.15$		

TABLE 1c : Probability of Admission (SAT greater than 1000)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Rank SAT Fin. Need	-0.92 0.0005 -0.00002	0.09 0.00 0.00	103.15*** 9.36*** 0.89	V. V V
N = 289 Constan	ot = 0.37	P = 55.02 R <sup>2</sup> = 0.37		

# INSTITUTION IV (cont.)

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Rank SAT Fin. Need	-35.94 0.01 -0.03	16.36 0.02 0.00	4.82** 0.65 102.15**	0.09 0.11 0.40
N = 21 Consta	6 nt = 111.20	$F = 46.62$ $R^2 = 0.40$		

TABLE 3 : Percentage of Grant Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Rank SAT Fin. Need	-6.35 0.02 0.002	12.77 0.01 0.00	0.25 3.19* 1.21	0.01 0.04 0.05
N = 86 Constan	nt = 28.45	$F = 1.49$ $R^2 = 0.05$		

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Rank SAT	-7 . 34 -0 . 02	13.49 0.01	0.30 1.83	0.00 0.02
Fin. Need	-0.003	0.00	1.53	0.03
N = 86 Constar	nt = 67.24	$F = 0.94$ $R^2 = 0.03$		

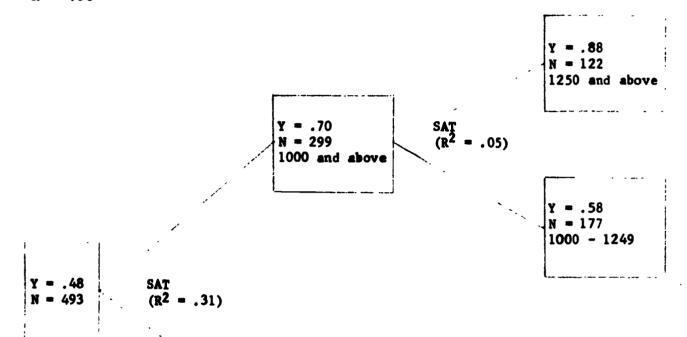
# INSTITUTION IV (cont.)

TABLE 5 : Percentage of Job Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Rank SAT Fin. Need	13.69 -0.004 0.0004	3.36 0.00 0.00	16.65*** 1.84 0.60	0.21 0.23 0.23
N = 86 Constar	nt = 4.31	P = 8.38 R <sup>2</sup> = 0.23		

TABLE 6: AID Tree

 $Y = Proportion of group admitted <math>R^2 = .36$ 



Y = .13 N = 194 999 and below

### INSTITUTION V

TABLE 1: Probability of Admission (Total Population)

/ariable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need SAT GPA	-0.00006 0.001 0.003	0.00 0.00 0.00	4.84** 96.21*** 179.97***	
N = 432 Constan	t = -1.37	F = 187.20 R <sup>2</sup> = 0.57		

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
SAT GPA Fin. Need	0.01 0.07 -0.04	0.01 0.04 0.00	0.23 3.06* 212.95***	0.01 0.05 0.53
N = 209 Constar	ont = 137.39	$F = 77.60$ $R^2 = 0.53$		

TABLE 3 : Percentage of Grant Aid

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
SAT GPA Fin. Need	0.01 0.19 -0.003	0.03 0.08 0.00	0.08 5.77** 0.47	0.00 0.09 0.10
N = 68 Constar	nt = -10.38	$F = 2.34$ $R^2 = 0.10$		

# INSTITUTION V (cont.)

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	F Cum	ulative R Square
SAT GPA Fin. Need	-0.03 -0.18 0.01	0.02 0.07 0.00	1.45 6.90*** 2.94*	0.03 0.13 0.17
N = 68 Constar	nt = 109.80	$F = 4.40$ $R^2 = 0.17$		

TABLE 5 : Percentage of Job Aid

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
SAT GPA Fin. Need	0.02 -0.01 -0.003	0.01 0.03 0.00	4.09** 0.26 4.36**	0.05
N = 68 Constar	nt = 0.58	$F = 2.72$ $R^2 = 0.11$		

### INSTITUTION VI

TABLE la : Probability of Admission

(Total Population)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Rank SAT Pin. Need	-0.92 0.001 -0.00004	0.10 0.00 0.00	82.41*** 106.58*** 4.69**	V167
N = 3: Consta	56 ant = -0.44	F = 90.98 R <sup>2</sup> = 0.44		

TABLE 1b : Probability of Admission

(SAT less than 1074)

Variable	Regression Coefficient	Standard Error	P	Cumulat ve R Square
Rank SAT Fin. Need	-0.34 -0.00003 -0.0001	0.16 0.09 0.00	4.84** 0.02 1.83	0.05 0.05 0.07
N = 12 Consta	21 ant = 0.46	F = 2.77 R <sup>2</sup> = 0.07		

TABLE 1c : Probability of Admission

(SAT greater than 1075 and less than 1199)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Renk SAT Fin. Need	-1.59 0.001 -0.0001	0.23 0.00 0.00	47.22*** 1.36 1.97	0.37 0.38 0.39
N = 88 Consta	3 ant = -0.59	$F = 17.93$ $R^2 = 0.39$		

### INSTITUTION VI (cont.)

TABLE 1d : Probability of Admission

(SAT greater than 1200)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Rank SAT Fin. Need	-1.11 0.0003 0.00000	0.13 0.00 0.00	76.65*** 1.19 0.05	0.37 0.38 0.38
N = 14 Consta	47 ant = 0.54	F = 29.23 $R^2 = 0.38$		

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Rank SAT Fin. Need	-32.70 -0.07 -0.01	22.20 0.02 0.00	2.17 14.94*** 26.45***	7.77
N = 18 Const.	80 ant = 178.52	$F = 14.50$ $R^2 = 0.20$		

TABLE 3 : Percentage of Grant Aid

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
Renk SAT Fin. Need	-15.48 0.01 0.001	13.79 0.01 0.00	1.26 0.72 0.27	0.02 0.03 0.03
N = 9 Const	5 ant = 74.18	F = 0.98 R <sup>2</sup> = 0.03		

### INSTITUTION VI (cont.)

TABLE 4 : Percentage of Loan Aid

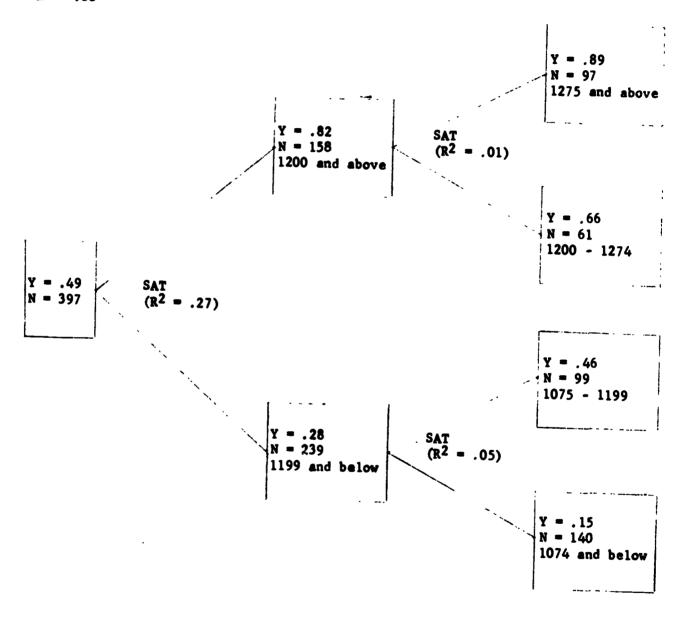
Va able	Regression Coefficient	Standard Error	F	Cumulative P. Square
Rank	15.48	13.79	1.26	0.02
SAT	-0.01	0.01	0.72	0.03
Fin. Need	-0.001	0.00	0.27	0.03
N - 9		∴¥ = 0.98 R <sup>2</sup> = 0.03	-	
Const	ant = 25.92	$R^2 = 0.03$		



### INSTITUTION VI (cont.)

TABLE 6: AID Tree

Y = Proportion of group admitted R<sup>2</sup> = .33



### INSTITUTION VII

TABLE 1 : Probability of Admission

(Total Population)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need GPA	-0.0003 0.003	0.00 0.00	16.17*** 67.34***	~
N = 24 Consta	47 ant = 0.48	$F = 53.11$ $R^2 = 0.30$		

TABLE 2 : Percentage of Need Met

Variable	Regrasion Coefficient	Standard Error	F	Cumulative R Square
Fin. Nead GPA	-0.05 0.14	0.01 0.06	33.43*** 5.25**	0.23 0.26
N = 1; Consta	33 ant = 133.56	$F = 23.00$ $R^2 = 0.26$		

TABLE 3 : Percentage of Grant Aid

Variable	Regression	Coefficient	Standard Error	F	Cumulative R	Square
Fin. Need GPA		0.03 0.04	0.00 0.03	52.4 <del>8</del> *** 1.67	0.37 0.38	
N = 88 Consta	3 ant = -31.85		F = 26.30 $R^2 = 0.38$			

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need GPA	-0.02 -0.01	0.01 0.04	15.47*** 0.04	0.15 0.15
N = 88 Consta	int = 79.91	F = 7.78 R2 = 0.15		

TABLE 5 : Percentage of Job Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need GPA	-0.01 -0.03	0.00 0.03	6.44** 1.40	0.06 0.08
N = 88 Consta	3 ant = 51.94	F = 3.59 R <sup>2</sup> = 0.08		

ERIC

#### INSTITUTION VIII

TABLE 1 : Probability of Admissic - (Total Population)

Variable	Regression Coefficient	Standard Error	F Cut	mulative R Square
Percentile SAT Fin. Need	0.005 -0.0004 0.00001	0.00 0.00 0.00	7.52*** 3.81* 0.04	0.02 0.03 0.03
N = 24 Consta	5 int = 0.64	F = 2.78 R <sup>2</sup> = 0.03		

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Percentile SAT Fin. Need	0.44 0.06 -0.05	0.23 0.03 0.00	3.54* 4.50** 97.23***	0.14 0.17 * 0.52
N = 13 Consta	36 ant = 71.44	F = 48.24 R <sup>2</sup> = 0.52		

TABLE 3 : Percentage of Grant Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Percentile SAT Fin. Need	-0.04 0.09 -0. <b>004</b>	0.15 0.02 0.00	0.09 25.13* 1.49	0.03 0.26 0.27
N = 86 Consta	int = -32.00	F = 10.07 R <sup>2</sup> = 0.27		

# INSTITUTION VIII (cont.)

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
Percentile	0.15	0.14	1.09	0.01
SAT	-0.08	0.02	21.06*	0.21
Fin. Need	0.003	0.00	1.56	0.22
N = 86	· · · · · · · · · · · · · · · · · · ·	F = 7.87		
Consta	nt = 102.27	$F = 7.87$ $R^2 = 0.22$		

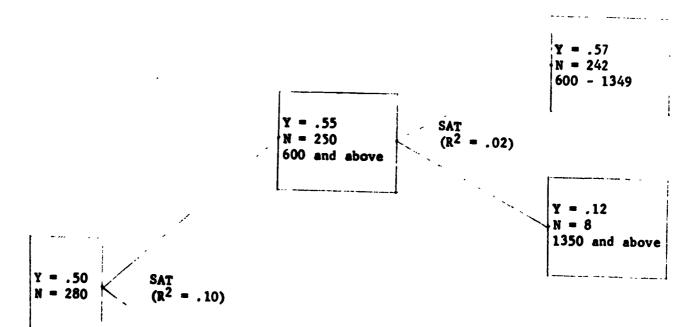
TABLE 5 : Percentage of Job Aid

Variable	Regression Coefficient	Standard Error	F	Cumulstive R Square
Percentile SAT Fin. Need	-0.10 -0.01 0.0002	0.09 0.01 0. <b>00</b>	1.37 1.77 0.01	0.04 0.06 0.06
N = 86 Consta	5 ant = 29.73	$F = 1.68$ $R^2 = 0.06$		

# INSTITUTION VIII (cont.)

TABLE 6: AID Tree

Y = Proportion of group admitted R<sup>2</sup> = .12



Y = .03 N = 30 599 and below

ERIC

# INSTITUTION IX

TABLE 1 : Probability of Admission (Total Population)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Pin. Need SAT GPA	-0.0001 0.0003 0.005	0.00 0.00 0.00	16.81*** 5.19** 148.24***	0.39
N = 2 Const	· ·	r <sup>2</sup> = 141.66 R <sup>2</sup> = 0.59		

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
SAT GPA Fin. Need	0.01 0.14 -0.02	0.02 0.09 0.00	0.17 2.67 38.74*	0.05 0.10 0.30
N = 1: Const	37 ant = 38.07	$F = 19.11$ $R^2 = 0.30$		

TABLE 3 : Percentage of Grant Aid

Variable	Regression Coefficient	Standard Error	F Cum	lative R Square
SAT GPA Fin. Need	0.06 0.13 -0.002	0.02 0.09 0.00	8.05*** 2.29 0.14	0.20 0.23 0.24
N = 62 Consta	2 ant = -51.40	F = 5.97 R <sup>2</sup> = 0.24		

# INSTITUTION IX (cont.)

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
SAT GPA Fin. Need	-0.06 -0.11 -0.003	0.02 0.08 0.00	11.00*** 2.13 0.47	_
N = 62 Consta	2 ant = 149.37	F = 6.67 R <sup>2</sup> = 0.26		

TABLE 5 : Percentage of Job Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
SAT GPA Fin. Need	0.004 -0.02 0.004	0.01 0.03 0.00	0.20 0.23 6.53**	0.00 0.01 0.11
N = 62 Const	2 ant = 2.03	$F = 2.29$ $R^2 = 0.11$		

ERIC

### INSTITUTION X

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
SAT GPA Fin. Need	-0.003 0.05 -0.03	0.01 0.05 0.01	0.05 0.99 41.93***	0.00 0.00
N = 235 Constan	st = 101.45	F = 14.19 R <sup>2</sup> = 0.16		

TABLE 3 : Percentage of Grant Aid

Variable	Regression Coefficient	Standard Error	F Cumu	lative R Square
SAT GPA Fin. Need	0.05 0.24 -0.0007	0.02 0.08 0.00	8.80*** 9.21*** 0.02	0.21 0.27 0.27
N = 103 Constar	3 nt = -92.79	F = 12.50 R <sup>2</sup> = 0.27		

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
SAT GPA Fin. Need	-0.03 -0.21 0.005	0.02 0.08 0.00	3.62* 7.16*** 1.16	0.13 0.18 0.19
N = 103 Constar	3 nt = 129.05	$F = 7.78$ $R^2 = 0.19$		



### INSTITUTION X (cont.)

TABLE 5 : Percentage of Job Aid

Regression Coefficient	Stundard Error	F	Cumulative R Square
-0.02	0.01	1.84	0.03
-0.03			0.03
-0.004	0.00	1.36	0.05
3	F = 1.61		
it = 63.74	$R^2 = 0.05$		
	-0.02 -0.03 -0.004	-0.02 0.01 -0.03 0.06 -0.004 0.00	-0.02       0.01       1.84         -0.03       0.06       0.22         -0.004       0.00       1.36



#### INSTITUTION XI

TABLE la : Probability of Admission (Total Population)

Variable	Regression Co	pefficient	Standard Error	F	Cumulative R	Square
Rank	-0,	.44	0.15	8.22***	0.04	
SAT	0.	. 0007	0.00	31.06***	0.11	
Fin. Need	-0	. 00004	0.00	6.15**	0.12	
N = 461			F = 21.60			
Constan	t = -0.42		$R^2 = 0.12$			

TABLE 1b : Probability of Admission (SAT less than 1324)

Variable	Regression Coefficient	Standard Error	P	Cumulative R So	quare
Rank	-0.35	0.16	4.98**	0.03	
SAT	0.0002	0.00	2.45	0.04	
Fin. Need	-0.00007	0.00	15.84***	0.10	
N = 269		$F = 9.56$ $R^2 = 0.10$			
Constai	nt = 0.15	R- ■ 0.10			

TABLE 1c : Probability of Admission (SAT greater than 1325)

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
Rank	-0.75	0.31	5.73**	0.03
SAT	0.0003	0.00	0.22	0.03
Fin. Need	0.00001	0.00	0.13	0.03
ท = 19:	2	F = 2.17		
Consta	nt = 0.06	$R^2 = 0.03$		

# INSTITUTION XI (cont.)

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Rank SAT Fin. Need	57.34 -0.004 -0.04	52.94 0.03 0.00	1.17 0.02 78.83***	0.00 0.00 0.40
N = 120 Constan	ot = 168.32	$R^2 = 26.28$ $R^2 = 0.40$		

TABLE 3 : Percentage of Grant Aid

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
Rank SAT Fin. Need	-4.48 -0.01 -0.01	15.48 0.01 0.00	0.08 0.38 47.84***	0.00 0.01 0.30
N = 11( Constar	5 nt = 114.59	$F = 16.28$ $R^2 = 0.30$		

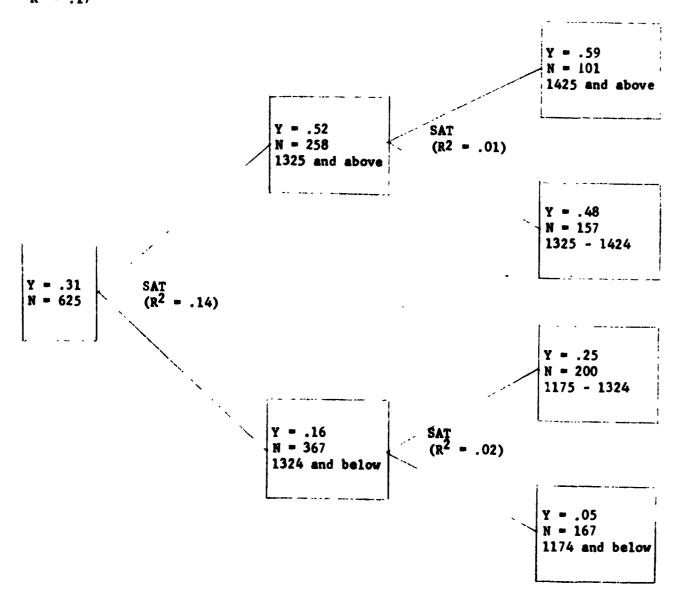
TABLE 4 : Percentage of Loan Aid

Variable	Regression	Coefficient	Standard Error	F	Cumulative R Square
Rank SAT Fin. Need		4.48 0.01 0.01	15.48 0.01 0.00	0.08 0.38 47.84***	0.00 0.01 0.30
N = 116 Constar	5 nt = -14.59		$F = 16.28$ $R^2 = 0.30$		

### INSTITUTION XI (cont.)

TABLE 6: AID Tree

Y = Proportion of group admitted R<sup>2</sup> = .17



#### INSTITUTION XII

TABLE 1: Probability of Admission (Total Population)

Variable	kegression Coefficient	Standard Error	F	Cumulative R Square
Race	0.17	0.06	8.18 ***	0.00
SAT	0.001	0.00	59.03 ***	0.26
GPA	0.001	0.00	15.31 ***	0.31
Fin. Need	-0.0002	0.00	131.01 ***	0.46
N = 501 Constai	l nt = -0.46	F = 103.82 R <sup>2</sup> = 0.46		

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
SAT	0.06	0.03	4.48*	0.00
GPA	0.06	<b>U.07</b>	0.91	0.01
Fin. Need	-0.01	0.00	28.87***	÷ 0.13
Race	66.77	11.46	33.98***	0.25
N = 213		F = 17.68 R <sup>2</sup> = 0.25		
Constar	nt = -35.33	$R^2 = 0.25$		

TABLE 3 : Percentage of Grant Aid

egression Coefficient	Standard Error	F	Cumulative R Square
0.12	0.03	12.32***	0.00
0.15	0.11	2.08	0.00
0.02	0.09	20.35***	0.35
46.43	14.85	9.77***	0.45
-211 43	F = 11.67		
	0.12 0.15 0.02	0.12 0.03 0.15 0.11 0.02 0.00 46.43 14.85	0.12 0.03 12.32*** 0.15 0.11 2.08 0.02 0.00 20.35*** 46.43 14.85 9.77***

# INSTITUTION XII (cont.)

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	F Cumu	lative R Square
SAT GPA Fin. Need Race	-0.10 -0.16 -0.02 -42.61	0.04 0.11 0.01 15.64	7.21 *** 2.01 9.05 *** 7.43 ***	0.00 0.00 0.22 0.31
N = 6: Constan	3 nt = 261.65	$R^2 = 6.45$ $R^2 = 0.31$		

TABLE 5 : Percentage of Job Aid

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
SAT GPA Fin. Need Race	-0.02 0.01 -0.01 -3.81	0.02 0.06 0.00 8.77	1.33 0.01 5.18** 0.19	0.00 0.01 0.11 0.11
N = 63 Constan	nt = 49.78	$F = 1.85$ $R^2 = 0.11$		

## INSTITUTION XIII

TABLE la : Probability of Admission

(Total Population)

Variable	Regression Coefficient	Standard Error	F Cu	mulative R Square
Race SAT GPA Fin. Need	0.15 0.0005 0.003 -0.00004	0.00 0.00 0.00 0.00	14.19 *** 25.48 *** 60.38 *** 7.51 ***	0.00 0.20 0.31 0.32
N = 497 Constai	nt = -0.46	R <sup>2</sup> = 58.33 R <sup>2</sup> = 0.32	<del>.</del>	

TABLE 1b : Probability of Admission (GPA less than 2.49)

Variable	Regression	Coefficient	Standard Error	F	Cumulative R Square
Race SAT GPA Fin. Need		0.30 0.0008 -0.001 -0.00007	0.12 0.00 0.00 0.00	5.93** 5.03** 0.51 0.72	0.06 0.13 0.13 0.14
N = 78 Constan	nt = -0.00		$F = 3.02$ $R^2 = 0.14$		

TABLE 1c : Probability of Admission (GPA greater than 2.50 and less than 2.74)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Race SAT GPA Fin. Need	0.30 0.001 -0.01 -0.00007	0.14 0.00 0.01 0.00	4.44** 11.76*** 1.84 0.49	0.02 0.20 0.23 0.24
N = 55 Constan	at = 2.50	F = 3.87 R <sup>2</sup> = 0.24		

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TABLE 1d : Probability of Admission (GPA greater than 2.75)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Race SAT GPA Fin. Need	0.08 0.0003 0.0006 -0.00003	0.04 0.00 0.00 0.00	4.38** 15.64*** 2.86 8.26***	0.09
N = 364 Constar	nt = 0.42	$F = 11.61$ $R^2 = 0.11$		

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	F C	Sumulative R Square
SAT GPA Fin. Need Race	-0.07 0.06 -0.04 -3.09	0.03 0.12 0.01 12.72	4.13** 0.31 62.73*** 0.06	0.00 0.02 0.16 0.16
N = 38: Constar	5 nt = 206.22	$F = 17.44$ $R^2 = 0.16$		

TABLE 3 : Percentage of Grant Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
SAT GPA Fin. Need Race	0.06 -0.02 0.009 2.08	0.02 0.06 0.00 6.87	11.29*** 0.15 7.64** 0.09	0.06
N = 179 Constan	at = 0.12	F = 4.90 R <sup>2</sup> = 0.10		

# INSTITUTION XIII (cont.)

TABLE 4 : Percentage of Loan Aid

Variable	Regression	efficient	Standard Error	F	Cumulative R Square
SAT GPA Fin. Need Race	0 -0	. 06 . 04 . 01 . 10	0.02 0.06 0.00 6.68	14.26*** 0.46 6.65** 0.22	0.06 0.07 0.11 0.11
N = 179 Constan	9 nt = 97.93		$F = 5.38$ $R^2 = 0.11$		

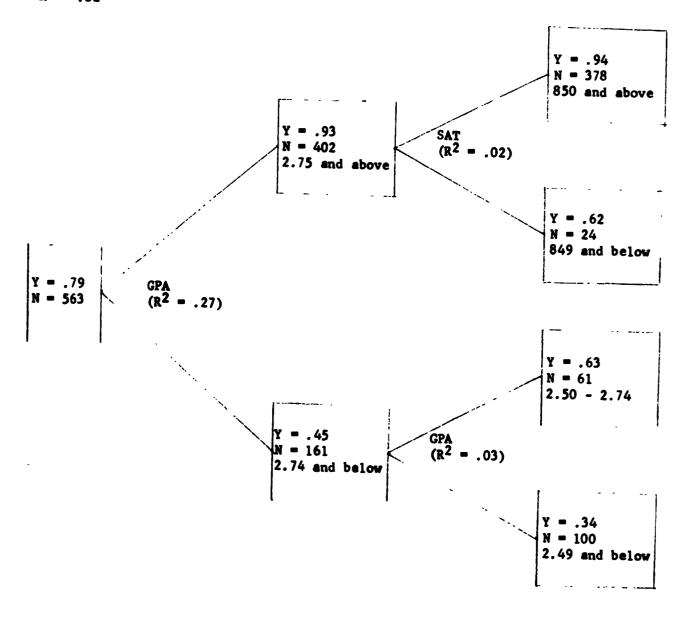
TABLE 5 : Percentage of Job Aid

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
SAT GPA Fin. Need Race	0.01 -0.02 -0.001 1.02	0.00 0.02 0.00 1.76	1.47 1.06 1.01 0.33	0.00 0.01 0.01 0.02
N = 179 Constan	ent = 1.94	$P = 0.66$ $R^2 = 0.02$		



TABLE 6: AID Tree

 $Y = Proportion of group admitted <math>R^2 = .32$ 



### INSTITUTION XIV

TABLE 1 : Probability of Admission (Total Population) Variable Regression Coefficient Standard Error Cumulative R Square Race -0.34 0.10 11.52 \*\*\* SAT 0.09 0.0002 0.00 1.91 Fin. Need 0.11 -0.00002 0.00 0.73 0.11 N = 128 F = 5.36 $R^2 = 0.11$ Constant = 0.81

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Race SAT Fin. Need	20.31 0.08 -0.02	17.50 0.02 0.00	1.35 18.72** 15.62**	0.00 * 0.12
N = 113 Constar	st = -13.94	F = 10.93 R <sup>2</sup> = 0.23		

TABLE 3 : Percentage of Grant Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Race SAT Fin. Need	23.04 -0.01 -0.01	16.91 0.02 0.00	1.86 0.16 14.12***	0.02 0.02
N = 94 Constar	nt = 105.89	F = 5.32 R <sup>2</sup> = 0.15		

## INSTITUTION XIV (cont.)

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Race	-23.04	16.91	1.86	0.02
SAT	0.01	0.02	0.16	0.02
Fin. Need	0.01	0.00	14.12***	
N = 94		F = 5.32		
Constar	nt = -5.89	$F = 5.32$ $R^2 = 0.15$		

### INSTITUTION XV

TABLE 1 : Probability of Admission (Total Population)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need	-0.00007	0.00	3.03	0.02
SAT	-0.0002	0.00	1.05	0.03
GPA	0.001	0.00	12.55 ***	<b>*</b> 0.17
N = 75		F = 4.37		
Consta	nt = 0.88	$R^2 = 0.17$		

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
SAT	0.05	0.04	1.22	0.04
GPA	0.15	0.09	2.59	0.06
Fin. Need	-0.04	0.01	11.70***	0.19
N = 73		F = 5.56 R <sup>2</sup> = 0.19	·	
Consta	nt = 57.37	R- = 0.19		

TABLE 3 : Percentage of Grant Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R	Square
SAT	0.12	0.03	19.64***	0.25	
GPA	0.15	0.06	5.48**	0.32	
Fin. Need	0.01	0.01	2.31	0.35	
N = 58 Constar	nt = -100.82	F = 9.69 R <sup>2</sup> = 0.35			

### INSTITUTION XV (cont.)

TABLE 4: Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
SAT	-0.06	0.03	4.29**	0.07
GPA	-0.09	0.07	1.72	0.10
Fin. Need	-0.01	0.01	1.05	0.12
N = 58		F = 2.48		
Consta	nt = 119.91	$R^2 = 0.12$		

TABLE 5 : Percentage of Job Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
SAT	-0.05	0.02	6.44**	0.11
GPA	-0.05	0.05	1.05	0.13
Fin. Need	-0.003	0.01	0.17	0.13
N = 58		F = 2.73 R <sup>2</sup> = 0.13		,
Constai	nt = 80.91	$R^2 = 0.13$		



#### INSTITUTION XVI

TABLE la : Probability of Admission (Total Population)

Variable	Regression Coefficient	Standard Error	F Cumu	lative R Squ	are
Race x Need SAT Fin. Need Rank Race	0.00001 0.002 -0.00007 -0.58 0.51	0.00 0.00 0.00 0.13 0.30	0.02 96.15 *** 8.37 *** 20.33 *** 2.76 *	0.01 0.34 0.40 0.46 0.46	:
N = 220 Constan		$F = 36.85$ $R^2 = 0.46$			· ·

TABLE 1b : Probability of Admission (SAT greater than 1125)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Race x Need SAT Fin. Need Rank Race	0.00005 0.0002 -0.00003 -0.92 -0.04	0.00 0.00 0.00 0.18 0.61	0.05 0.19 1.37 26.40***	0.01 0.05 0.14 0.34 0.34
N = 91 Constan	nt = 0.83	F = 8.78 $R^2 = 0.34$		

TABLE 1c : Probability of Admission (SAT less than 1124)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Race x Need SAT Fin. Need Rank Race	-0.00002 0.002 -0.0001 -0.44 0.72	0.00 0.00 0.00 0.17 0.36	0.02 33.49*** 7.47*** 6.49** 4.01**	0.10
N = 129 Constan		F = 16.71 R <sup>2</sup> = 0.40		

# INSTITUTION XVI (cont.)

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Race x Need SAT Fin. Need Rank Race	0.01 -0.03 -0.02 -38.25 -5.50	0.01 0.03 0.00 24.98 35.48	1.69 1.07 17.47 *** 2.35 0.02	0.14 0.15 0.31 0.32 0.32
N = 110 Constant	: = 124.44	$F = 9.89$ $R^2 = 0.32$		

TABLE 3 : Percentage of Grant Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Race x Need SAT Fin. Need Rank Race	0.002 0.03 0.005 -12.47 6.68	0.01 0.02 0.01 17.15 23.03	0.04 2.38 1.14 0.53 0.08	0.04 0.08 0.10 0.11 0.12
N = 54 Constant	= 21.93	F = 1.25 R <sup>2</sup> = 0.12		

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
Race x Need SAT Fin. Need Rank Race	-0.00 <b>3</b> -0.02 -0.002 8.25 8.87	0.00 0.01 0.00 9.17 12.32	0.41 2.19 0.38 0.81 0.52	0.01 0.06 0.08 0.10 0.11
N = 54 Constant	= 38.37	$P = 1.15$ $R^2 = 0.11$		



# INSTITUTION XVI (cont.)

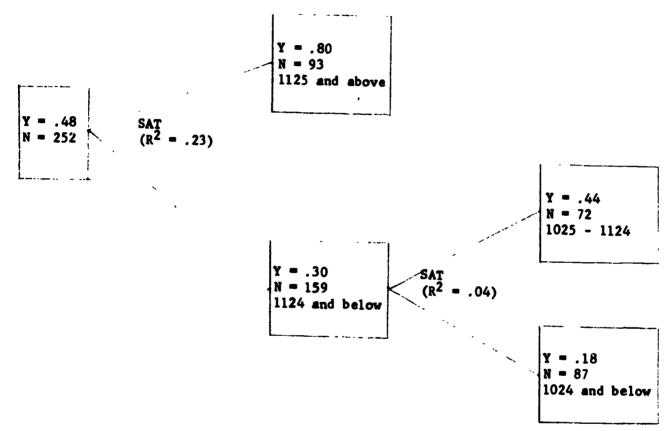
TABLE 5 : Percentage of Job Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Race x Need SAT Fin. Need Rank Race	0.001 -0.02 -0.004 4.21 -15.55	0.01 0.02 0.00 16.46 22.11	0.02 0.61 0.59 0.07 0.49	0.08 0.09 0.09 0.09 0.10
N = 54 Constant	: = 39.70	F = 1.11 R <sup>2</sup> = 0.10		

# INSTITUTION XVI (cont.)

TABLE 6: AID Tree

Y = Proportion of group admitted R<sup>2</sup> = .27





#### INSTITUTION XVII

TABLE la : Probability of Admission (Total Population)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Race x Need SAT Fin. Need Rank Race	0.00001 0.001 -0.00007 -0.37 0.12	0.00 0.00 0.00 0.28 0.24	0.01 47.91 *** 15.78 *** 2.02 0.26	
N ≈ []: Constan		F = 20.26 R <sup>2</sup> = 0.17		

TABLE 1b : Probability of Admission (SAT less than 1379)

Variable	Regression Coefficient	Standard Error	F Cum	ulative R Square
Race x Need SAT Fin. Need Rank Race	-0.00004 0.0005 -0.00004 -0.38 0.22	0.00 0.00 0.00 0.26 0.30	0.25 4.19** 3.81* 2.05 0.57	0.00 0.04 0.06 0.06 0.06
N ≈ 27 Consta		F = 3.70 R <sup>2</sup> = 0.06		

TABLE 1c : Probability of Admission (SAT greater than 1400)

Variable	Regression Coefficient	Standard Error	F Cumu	lative R Square
Race x Need SAT Fin. Need Rank Race	0.00002 0.002 -0.00008 -1.37 0.06	0.00 0.00 0.00 0.64	0.04 8.24 *** 9.65 *** 4.62 ** 0.03	0.00 0.05 0.09 0.11 0.11
N = 24 Constan		F = 5.57 R <sup>2</sup> = 0.11		



# INSTITUTION XVII (cont.)

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	P (	Cumulative R Square
Race x Need SAT Fin. Need Rank Race	0.01 -0.003 -0.03 -193.74 -2.45	0.02 0.04 0.00 112.29 47.51	0.39 0.01 58.78 *** 2.98 * 0.00	0.00 0.00 0.28 0.29 0.29
N = 171 Constan	nt = 167.53	$F = 13.70$ $R^2 = 0.29$		

TABLE 3 : Percentage of Grant Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Race x Need SAT Fin. Need Pank Race	0.007 0.01 -0.202 -76.04 -18.13	0.00 0.01 0.00 39.64 13.73	2.26 1.24 1.70 3.68 * 1.74	0.00 0.02 0.03 0.05 0.06
N = 14 Constan	7 nt = 70.37	$F = 1.91$ $R^2 = 0.06$		

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coeffici.nt	Standard Error	P	Cumulative R Square
Race x Need SAT Fin. Need Rank Race	-0.007 -0.01 0.002 76.04 18.13	0.00 0.01 0.00 39.64 13.73	2.26 1.24 1.70 3.68* 1.74	0.00 0.02 0.03 0.05 0.06
N = 14 Constan	7 nt = 29.63	F = 1.91 R <sup>2</sup> = 0.06	· · · · · · · · · · · · · · · · · · ·	

### INSTITUTION XVII (cont.)

TABLE 6: AID Tree

 $Y = Proportion of group admitted <math>R^2 = .16$ 

Y - .60 N - 163 1440 and above SAT (R<sup>2</sup> = .01) 1410 and above Y = .41N = 60 1410 - 1439  $(R^2 - .13)$ Y - .30 N = 1521330 - 1409 Y = .20 N = 323 ŚAT  $(R^2 = .02)$ 1409 and below Y = .11N = 1711329 and below

#### INSTITUTION XVIII

TABLE la : Probability of Admission

(Total Population)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Race x Need SAT Fin. Need Rank Race	0.00001 0.002 -0.00004 -0.26 0.36	0.00 0.00 0.00 0.08 0.16	0.01 298.69 *** 9.94 *** 10.05 *** 4.93 **	0.36
N = 693 Constant	: = -1.51	F = 82.87 R <sup>2</sup> = 0.38		

TABLE 1b : Probability of Admission (SAT less than 1219)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Race x Need SAT Fin. Need Rank Race	-0.0001 0.001 -0.00003 -0.16 0.76	0.00 0.00 0.00 0.09 0.18	3.80* 17.20*** 2.19 3.49* 16.70***	0.18 0.19
N = 272 Constant	± = -0.50	$F = 16.22$ $R^2 = 0.23$		

TABLE 1c : Probability of Admission (SAT greater than 1220 and less than 1289)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Race x Need SAT Fin. Need Rank Race	0.00009 -0.003 -0.00006 -0.69 0.19	0.00 0.00 0.00 0.26 0.79	0.10 1.89 2.30 7.15***	0.04 0.05 0.03 0.13 0.13
N = 115 Constant	: = 4.75	$F = 3.39$ $R^2 = 0.13$		

## INSTITUTION XVIII (cont.)

TABLE 1d : Probability of Admission (SAT greater than 1290)

Variable	Regression Coefficient	Standard Error	F C	umulative R Square
Race x Need SAT Fin. Need Rank Race	0.0001 0.001 -0.00003 -0.18 -0.33	0.00 0.00 0.00 0.19 0.27	1.35 12.19 *** 3.90 ** 0.87 1.48	0.00 0.05 0.06 0.06 0.07
N = 306 Constant	: <b>-</b> -0.69	$F = 4.44$ $R^2 = 0.07$		

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Race x Need SAT Fin. Need Rank Race	0.01 0.004 -0.03 -26.001 6.29	0.01 0.02 0.00 18.98 21.21	2.55 0.05 169.94 *** 1.88 0.09	0.04 0.05 0.40 0.41 0.41
N = 335 Constant	: = 94.28	F = 44.83 $R^2 = 0.41$		

TABLE 3 : Percentage of Grant Aid

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
Race x Need SAT Fin. Need Rank Race	-0.002 0.04 0.01 -44.85 26.003	0.01 0.02 0.00 29.14 21.10	0.07 2.67 9.18*** 2.37 1.52	0.07 0.08 0.13 0.15 0.17
N = 122 Constant	: = -0.64	r = 4.60 $R^2 = 0.17$		



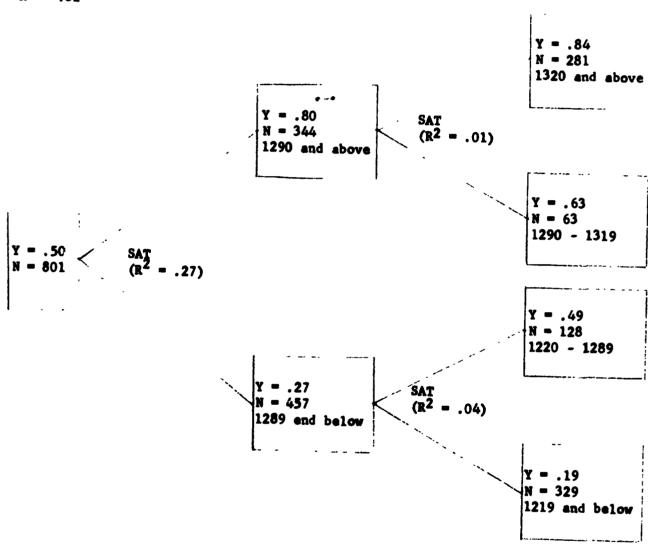
# INSTITUTION XVIII (cont.)

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Race x Need SAT Fin. Need Rank Race	0.002 -0.04 -0.01 44.85 -26.003	0.01 0.02 0.00 29.14 21.10	0.07 2.67 9.18 *** 2.37 1.52	0.07 0.08 C.13 0.15 0.17
N = 122 Constant	= 100.64	$F = 4.60$ $R^2 = 0.17$		

TABLE 6: AID Tree

Y = Proportion of group admitted R<sup>2</sup> = .32



#### INSTITUTION XIX

TABLE la : Probability of Admission

(Total Population)

Variable	Regression Coefficient	Standard Error	F Cum	ulative R Square
Rank SAT Fin. Need	-0.03 0.001 -0.00001	0.02 0.00 0.00	2.11 46.18 *** 0.18	0.01 0.13 0.13
N = 37 Consta		F = 18.28 R <sup>2</sup> = 0.13		

TABLE 1b : Probability of Admission (SAT less than 1219)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Rank SAT Fin. Need	-0.02 -0.00007 -0.00003	0.02 0.00 0.00	1.10 0.06 0.65	0.01 0.01 0.01
N = 17 Consta	70 ant = 0.46	F = 0.63 R <sup>2</sup> = 0.01		

TABLE 1c : Probability of Admission (SAT greater than 1220)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Renk SAT Fin. Need	-0.85 0.001 0.00003	0.19 0.00 0.00	20.81*** 5.91** 0.87	
N = 20 Consta	ont = -0.71	F = 10.97 R <sup>2</sup> = 0.14		



#### INSTITUTION XIX (cont.)

TABLE 2 : Percentage of Need Met

Veriable	Regression Coefficient	Stenderd Error	F	Cumulative R Square
Rank SAT Fin. Need	-3.21 -0.03 -0.04	54.78 0.05 0.01	0.00 0.38 19.03***	0.31 0.01 0.11
N = 1 Const	76 ent = 192.86	F = 6.86 R <sup>2</sup> = 0.11		

TABLE 3 : Percentage of Grant Aid

Verieble	Regression Coefficient	Standard Error	F	Cumulativa R Square
Rank SAT Fin. Nead	-21.34 0.01 0.01	22.54 0.01 0.00	0.90 1.29 16.90***	0.00 0.01 * 0.26
N = 5 Const	3 ent = 28.64	F = 5.82 R <sup>2</sup> = 0.26		

TABLE 4 : Percentage of Loan Aid

Veriable	Regression Coefficient	Stenderd Error	P	Cumulative R Square
Rank SAT Fin. Heed	23.65 -0.01 -0.01	22.52 0.01 0.00	1.10 0.85 17.70***	0.01 0.02 0.28
N = 5; Const	3 ent = 68.02	F = 6.25 R <sup>2</sup> = 0.28		



## INSTITUTION XIX (cont.)

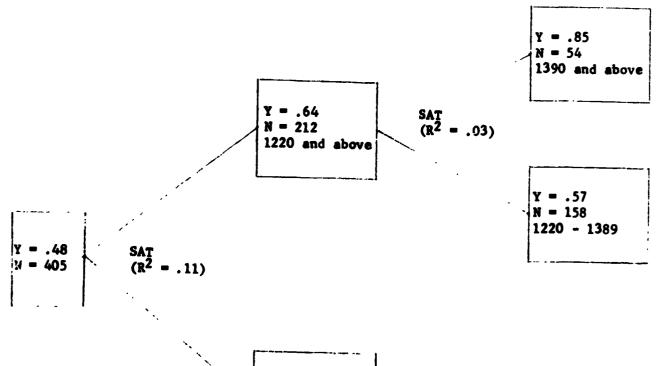
TABLE 5 : Percentage of Job Aid

Variable	Regression Coefficient	Standard Error	F Cumu	lative R Square
Renk SAT Fin. Need	-2.30 -0.003 0.0003	1.68 0.00 0.00	1.88 8.53 *** 1.47	0.01 0.23 0.25
N = 5: Consta	3 ant = 3.34	F = 5.39 R <sup>2</sup> = 0.25		

### INSTITUTION XIX (cont.)

TABLE 6: AID Tree

 $Y = Proportion of group admitted <math>R^2 = .14$ 



Y = .30 N = 193 1219 and below

TABLE 1 : Probability of Admission

8

(Total Population)

Variable	Regression Coefficient	nt Standard Error	F	Cumulative R Sq	uare
Fin. Need GPA	-0.0002 0.004	0.00 0.00	82.63 292.00		
N = 982 Constar	2 nt = -0.30	F = 315.69 R <sup>2</sup> = 0.39			

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need GPA	-0.11 -0.16	0.01 0.12	132.61 *** 2.20	0.24 0.25
N = 414 Constan	4 nt = 273.07	F = 67.02 $R^2 = 0.25$		

TABLE 3 : Percentage of Grant Aid

Variable	Regression	Coefficient	Standard Error	P	Cumulative R Square
Fin. Need GPA	<del></del>	0.02 0.09	0.00	12.69** 2.56	0.06 0.07
N = 160 Constan	ont = -4.24		F = 6.35 R <sup>2</sup> = 0.07		

#### INSTITUTION XX (cont.)

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	P (	Cumulative R Square
Fin. Need GPA	-0.02 -0.12	0.00 0.05	13.72 *** 5.08 **	0.05 0.08
N = 160 Constan	6 nt = 113.59	F = 7.03 R <sup>2</sup> = 0.08	-	

TABLE 5 : Percentage of Job Aid

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
Fin. Need	0.001	0.00	0.31	0.00
GPA	0.04	0.02	4.17**	0.03
N = 160		F = 2.19 R <sup>2</sup> = 0.03		-
Consta	nt = -9.35	$R^2 = 0.03$		

#### INSTITUTION XXI

TABLE 1 : Probability of Admission (Total Population)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need SAT GPA	-0.00004 -0.00009 -0.0005	0.00 0.00 0.00	3.66 * 0.50 1.55	0.01 0.01 0.01
N = 4 Const	75 ant = 1.07	F = 1.80 R <sup>2</sup> = 0.01		· · · · · · · · · · · · · · · · · · ·

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
SAT GPA Fin. Need	0.15 0.06 -0.10	0.11 0.30 0.02	1.64 0.04 15.96***	0.01 0.01
N = 2 Const	91 ant = 32.17	F = 6.42 R <sup>2</sup> = 0.06		

TABLE 3 : Percentage of Grant Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
SAT GPA Fin. Need	0.02 0.11 -0.0002	0.02 0.05 0.00	1.58 4.35** 0.00	0.02 0.04 0.04
N = 2; Consta	28 ant = 14.24	F = 3.13 R <sup>2</sup> = 0.04		



## INSTITUTION XXI (cont.)

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	F Cumu	ilative R Square
SAT GPA Pin. Need	-0.02 -0.17 -0.004	0.01 0.05 0.00	2.82 * 12.94 *** 1.05	0.03 0.08 0.09
N = 2: Consta	28 ant = 107.96	F = 7.21 R <sup>2</sup> = 0.05		

TABLE 5 : Percentage of Job Aid

Variable	Regression	Coefficient	Standard Error	F Cumu	lative R Square
SAT GPA Fin. Need		0.003 0.06 0.004	0.01 0.02 0.00	0.29 7.03*** 5.67**	0.00 0.03 0.05
N = 22 Co ace	28 35t = -22.20	)	F = 4.03 R <sup>2</sup> = 0.05		

TABLE 1 : Probability of Admission (Total Population)

Variabla	Ragrassion Coefficient	Standard Error	P	Cumulative R Square
Pin. Nead Rank	-0.0001 -0.52	0.00 0.07	8.77 *** 52.82 ***	0.00
N = 61 Consta	12 int = 0.97	F = 48.00 R <sup>2</sup> = 0.14		

TABLE 2 : Parcentage of Need Met

Variable	Regrassion Coefficient	Standard Error	r	Cumulative R Square
Fin. Need Rank	-0.11 -28.62	0.02 46.75	19.39*** 0.38	0.07 0.07
N = 3: Const.	34 ant = 222.58	$F = 11.86$ $R^2 = 0.07$		

TABLE 3 : Parcentage of Grant Aid

Variabla	Ragression Coefficient	Standard Error	P	Cumulativa R Square
Fin. Head Rank	-0.01 -48.95	0.00 13.43	6.41** 13.29***	0.11 0.20
N = 12 Consta	22 ant = 54.36	F = 14.89 R <sup>2</sup> = 0.20		

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need Rank	-0.003 42.74	0.01 15.69	0.35 7.43 <del>44</del> 4	0.00 0.06
N = 12 Consta	22 ant = 36.41	F = 3.79 R <sup>2</sup> = 0.06		

TABLE 5 : Percentage of Job Aid

Variable	Regression	Coefficient	Standard Error	F	Cumulative & Square
Fin. Need Rank		0.02 6.21	0.01 15.61	7.68*** 0.16	0.07 0.08
N = 12 Consta	22 int = 9.23		r = 4.90 $R^2 = 0.08$		

#### INSTITUTION XXIII

TABLE la : Probability of Admission

(Total Population)

Variable R	egression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need SAT GPA	0.00002 0.0005 0.003	0.00 0.00 0.00	1.09 24.36 ** 76.27 **	<b>7.1</b>
N = 554 Constant =	-0.74	$F = 59.97$ $R^2 = 0.25$		

TABLE 1b : Probability of Admission (GPA less than 2.99)

Variable	Regression Coefficient	Standard Error	F Cur	mulative R Square
Fin. Need SAT GPA	0.0002 0.0007 0.001	0.00 0.00 0.00	4.88** 9.73*** 0.58	0.06 0.19 0.20
N = 91 Constan	at = -0.91	F = 7.10 R <sup>2</sup> = 0.20		

TABLE 1c : Probability of Admission

## (GPA greater than 3.00)

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
Fin. Need SAT GPA	-0.00001 0.0004 0.0007	0.00 0.00 0.00	0.52 15.42*** 2.07	0.01 0.06 0.06
N = 463 Constan	3 nt = 0.25	F = 10.00 R <sup>2</sup> = 0.06		

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### INSTITUTION XXIII (cont.)

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	F Cum	ulative R Square
SAT GPA Fin. Need	-0.05 0.09 -0.03	0.02 0.07 0.00	8.23 *** 1.99 47.12 ***	0.01 0.02 0.12
N = 39	8 nt = 84.70	F = 18.15 R <sup>2</sup> = 0.12		-

TABLE 3 : Percentage of Grant Aid

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
SAT GPA Fin. Need	0.03 0.12 -0.002	0.04 0.12 0.01	0.47 0.96 0.07	0.07 0.09 0.09
N = 54 Constan	nt = -0.53	$\mathbf{F} = 1.65$ $\mathbf{R}^2 = 0.09$		

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	r	Cumulative R Square
SAT GPA Fin. Need	-0.04 -0.07 -0.005	0.04 0.12 0.01	1.34 0.32 0.35	0.05 0.05 0.06
N = 54 Constan	nt = 103.12	F = 1.06 R <sup>2</sup> = 0.06		

## INSTITUTION XXIII (cont.)

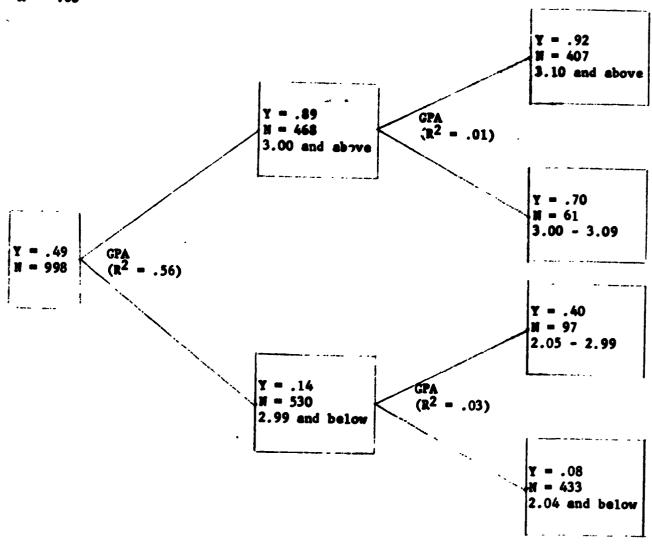
TABLE 5 : Percentage of Job Aid

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
SAT GPA Fin. Need	0.02 -0.05 0.01	0.02 0.07 0.00	0.52 0.58 2.05	0.01 0.03 0.06
N = 54 Constar	nt = -2.58	F = 1.13 R <sup>2</sup> = 0.06		

#### INSTITUTION EXIII (cont.)

TABLE 6: AID Tree

 $Y = Proportion of group admitted <math>R^2 = .60$ 



#### INSTITUTION XXIV

TABLE 1 : Probability of Admission (Total Population)

Verieble	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need Percentile	-0.00008 0.01	0.00 0.00	2.81 * 29.51 ***	0.06 * 0.16
N = 26 Consta	is int = 0.45	F = 24.32 R <sup>2</sup> = 0.16		

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	F Cu	mulative R Square
Pin. Need Percentile	-0. <b>08</b> 0.36	0.01 0.23	52.01*** 2.40	0.30 0.31
N = 15 Consta	9 int = 117.82	$F = 35.27$ $R^2 = 0.31$		

TABLE 3 : Percentage of Grant Aid

Variable	Regression Coefficient	- Standard Error	P	Cumulative R Square
Pin. Need Percentile	0.02	0.01 0.14	5.91** 64.90***	0.01 0.49
N = 73 Consta		F = 33.27 R <sup>2</sup> = 0.49		

## INSTITUTION XXIV (cont.)

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	F Cumu	lative R Square
Fin. Need Percentile	-0.02 -0.96	0.01 0.13	8.05 *** 54.67 ***	0.03 0.45
N = 73 Consta	int = 117.57	F = 28.93 R <sup>2</sup> = 0.45		

TABLE 5 : Percentage of Job Aid

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
Fin. Need Percentile	0.002 -0.15	0.01 0.13	0.08 1.34	0.00 0.02
N = 73 Consta	nt = 22.56	F = 0.77 R <sup>2</sup> = 0.02		

### INSTITUTION XXV

TABLE 1 : Probability of Admission (Total Population)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Race Percentile Fin. Need	0.004 0.001 -0.00002	0.02 0.00 0.00	0.04 14.46 ** 1.76	0.01 * 0.07 0.08
N = 28 Consta	3 int = 0.92	F = 7.55 R <sup>2</sup> = 0.08		

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Race Percentile Fin. Need	1.17 -0.03 -0.10	19.11 0.34 0.02	0.00 0.01 30.92***	0.05 0.05 0.16
N = 241 Constant = 160.33		F = 15.22 R <sup>2</sup> = 0.16		

TABLE 3 : Percentage of Grant Aid

Variable	Regression	Coefficient	Standard	Error	F	Cumulative R	Square
Race Percentile Fin. Need		3.91 1.13 0.01	4.32 0.09 0.00		0.82 172.21*** 2.42	0.00 0.58 0.59	
N = 12 Consta	=	)	P □ 5 R <sup>2</sup> =	8.61 0.59			

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	F C	umulative R Square
Race Percentile Fin. Need	-6.44 -0.94 -0.02	5.40 0.11 0.01	1.42 75.20 *** 12.31 ***	0.01 0.37 0.42
N = 12 Consta	27 ant = 113.45	$F = 30.22$ $R^2 = 0.42$		

TABLE 5 : Percentage of Job Aid

Variable	Regression Coefficient	Standard Error	F Cum	lative R Square
Race Percentile Fin. Need	2.53 -0.20 0.01	5.25 0.10 0.01	0.23 3.48* 5.44***	0.01 0.03 0.07
N = 12 Consta	27 ant = 27.45	F = 3.27 R <sup>2</sup> = 0.07		

### JUSTITUTION XXVI

TABLE 1 : Probability of Admission

(Total Population)

Variable	Regression	Coefficient	Standard Error	P	Cumulative R	Square
Fin. Need GPA		0.00000 0.01	0.00 0.00	9.00 608.96 ***	0.10 0.77	
N = 21 Consta	l6 ant = -0.90		F = 350.89 R <sup>2</sup> = 0.77		-	

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standerd Error	F	Cumulative R Square
Fin. Need GPA	-0.06 -0.22	0.01 0.14	22.13*** 2.37	0.14 0.16
N = 1 Const	26 ant = 219.22	F = 11.41 R <sup>2</sup> = 0.16		

TABLE 3 : Percentage of Grent Aid

Variable	Regression	Coefficient	Standard Error	F	Cumulative R Squar
Fin. Need GPA		0.004 0.31	0. <b>00</b> 0. <b>06</b>	1.09 27.23***	0.00 0.18
N = 13 Const	31 ent = -38.38	3	F = 13.62 R <sup>2</sup> = 0.18		

## INSTITUTION XXVI (cont.)

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Sc	quare
Fin. Need CPA	-0.002 -0.32	.06	0.32 30.60 **	0.00 * 0.19	
N = 131 Constant = 136.94		F = 15.50 R <sup>2</sup> = 0.19			

TABLE 5 : Percentage of Job Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need GPA	-0.002 0.01	0.00 0.01	5.46** 0.33	0.05 0.05
N = 13 Consta	31 ant = 1.44	F = 3.33 R <sup>2</sup> = 0.05		



ARLE 1 : Probability of Admission

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(Total Population)

Variable	Regression Coefficient	Standard Error	F C	Aumulative R Square
Fin. Need GPA	-0.0001 0.001	0.00 0.00	11.06 *** 13.40 ***	0.06 0.09
N = 30 Const.	62 ant = 0.72	F = 18.05 R <sup>2</sup> = 0.09		

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need GPA	-0.09 0.15	0.01 0.08	95.62*** 3.34*	0.28 0.29
N = 2 Const	86 ant = 147.65	$F = 57.23$ $R^2 = 0.29$		

TABLE 3 : Percentage of Grant Aid

Veriable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need GPA	0.01	0.00 0.05	6.76 **** 22.84 ****	0.03 9.16
N = 1 Const		$F = 13.82$ $R^2 = 0.16$		

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need GPA	0.003 -0.08	0.00 0.05	0.01 2.58	0.00 0.02
N = 1 Const	50 ant = 53.68	$F = 1.31$ $R^2 = 0.02$		

TABLE 5 : Percentage of Job Aid

Variable	Regression Coefficient	Standard Error	P Cum	ulative R Square
Fin. Need GPA	-0.01 -0.14	0.00 0.05	5.75 ** 7.81 ***	0.03 0.08
N = 1. Const	50 ant = 90.42	F = 6.24 R <sup>2</sup> = 0.08		

### INSTITUTION XXVIII

TABLE 1 : Probability of Admission

(Total Population)

Variable	Regression Coe	fficient	Standard Error	F	Cumulative R Squar
Fin. Need Rank	-0.0 -0.9		0.00 0.09	29.85 *** 110.85 ***	~ · • •
N = 198 Constar	s at = 1.56		$F = 109.31$ $R^2 = 0.53$		

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
Fin. Need Rank	-0.17 -94.51	0.03 56.75	30.92*** 2.77	0.24 0.27
N = 97 Constan	nt = 297.89	$F = 17.07$ $R^2 = 0.27$		

TABLE 3 : Percentage of Grant Aid

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
Fin. Need Renk	0.03 -9.70	0.01 19.77	6.42 <b>**</b> 0.24	0.11 <b>0</b> .11
N = 54 Constan	nt = 7.04	F = 3.28 $R^2 = 0.11$		

# INSTITUTION XXVIII (cont.)

TABLE 4 : Percentage of Loan Aid

Variablo	Regression Coefficient	Standard Error	P	Cumulative R Square
Fin. Need Rank	-0.03 -29.73	0.01 24.21	6.77 *** 1.51	-
N = 54 Constan	at = 88.98	$P = 4.30$ $R^2 = 0.14$		

TABLE 5 : Percentage of Job Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need Rank	0.01 39.43	0.01 16.82	0.59 5.49**	0.01
N = 54 Constan	at = 3.98	F = 3.13 $R^2 = 0.11$		

#### INSTITUTION MXIX

TABLE 1 : Probability of Admission (Total Population)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Pin. Need Rank	-0.0G006 -1.31	0.00 0.06	2.43 427.91**	0.22 * 0.69
N = 294 Constan	t = 1.28	F = 317.81 $R^2 = 0.69$		

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
Fin. Need Rank	-0.03 -6.16	0.01 17.11	24.28*** 0.13	0.16 0.16
N = 143 Constan	3 nt = 80.58	$F = 13.28$ $R^2 = 0.16$		

TABLE 3 : Percentage of Grant Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need Rank	-0.0001 -99.83	0.01 <b>26</b> .15	0.00 14.58***	0.00 * 0.22
N = 56 Constar	nt = 72.38	$F = 7.43$ $R^2 = 0.22$		

### INSTITUTION XXIX (cont.)

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	F C	umulative R Square
Fin. Need Rank	-0.003 7 <b>8.36</b>	0.01 24.95	0.11 9.36 ***	0.00 0.16
N = 56 Constan	nt = 17.21	F = 4.93 R <sup>2</sup> = 0.16		<del></del>

TABLE 5 : Percentage of Job Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need	0.003	0.01	0.19	0.01
Renk	21.48	19.46	1.22	0.03
N = 56		$F = 0.79$ $R^2 = 0.03$		
Consta	nt = 10.41	$R^2 = 0.03$		

## INSTITUTION XXX (cont.)

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need GPA	-0.01 -0.04	0.01 0.05	3.36* 0.72	0.02 0.03
N = 147 Constan	nt = 75.21	F = 1.89 $R^2 = 0.03$		

TABLE 5 : Percentage of Job Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need GPA	0.002	0.00 0.02	0.41 4.67*	0.01 0.04
N = 147 Constan	7 nt = 13.54	F = 2.73 R <sup>2</sup> = 0.04		

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#### INSTITUTION XXX

TABLE 1 : Probability of Admission (Total Population)

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
Fin. Need GPA	-0.00001 0.00009	0.00 0.00	0.22 0.29	0.00 0.00
N = 23: Constan	3 nt = 0.95	F = 0.32 $R^2 = 0.00$		

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need GPA	0.002 0.05	0.02 0.15	0.01 0.11	0.00 0.00
N = 19: Constan	3 nt = 61.33	$F = 0.06$ $R^2 = 0.00$		

TABLE 3 : Percentage of Grant Aid

Variable	Regression	Coefficient	Standard Error	P	Cumulative R Square
Fin. Need GPA		0.01 0.08	0.01 0.05	2.55 2.52	0.01 0.03
N = 147 Constan	nt = 11.25		$F = 2.29$ $R^2 = 0.03$		

### INSTITUTION XXXI

TABLE 1 : Probability of Admission

(Total population)

Variable	Regression Coeff:	cient Standard Erro	r F	Cumulative R Square
Fin. Need GPA	-0.0000 0.004	0.00 0.00	3.69 <b>*</b> 269.07 <b>**</b>	0.12 * 0.46
N = 417 Constan	t = -0.23	F = 179.80 R <sup>2</sup> = 0.46		

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square	
Fin. Need GPA	-0.05 0.38	0.01 0.12	16.64 *** 9.30 ***	0.10	
N = 223 Constan	3 nt = 13.07	F = 17.39 R <sup>2</sup> = 0.14			

TABLE 3 : Percentage of Grant Aid

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
Fin. Need GPA	-0.02 0.15	0.01 0.06	15.35*** 6.19**	0.14 0.20
N = 85 Constar	nt = 44.06	F = 10.20 R <sup>2</sup> = 0.20		

### INSTITUTION XXXI (cont.)

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need GPA	0.01 -0.12	0.00 0.05	4.74 ** 5.60 **	0.0,
N = 87 Constan	nt = 45.95	F = 4.86 R <sup>2</sup> = 0.10		

TABLE 5 : Percentage of Job Aid

Variable	Regression Coefficient	Standard Error	F (	Cumulative R Square
Fin. Need GPA	0.01 -0.03	0.00 0.04	9.30*** 0.58	0.10 0.10
N = 85 Constan	nt = 9.99	F = 4.81 $R^2 = 0.10$		

### INSTITUTION XXXII

TABLE 1 : Probability of Admission (Total Population)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need Percentile	-0.0002 0.01	0.00 0.00	8.00 *** 156.51 ***	- <del></del> -
N = 25 Consta	55 ant = 0.23	F = 111.58 R <sup>2</sup> = 0.47		

#### INSTITUTION XXXIII

TABLE la : Probability of Admission

(Total Population)

Variable	Regression Coefficient	Standard Error	F Cum	lative R Square
Fin. Need SAT GPA	-0.0003 0.0004 0.002	0.00 0.00 0.00	25.99 *** 6.24 ** 50.68 ***	0.24 0.28 0.43
N = 20 Const	09 ant = -0.06	$F = 50.73$ $R^2 = 0.43$		<del></del>

TABLE 1b : Probability of Admission (GPA less than 1.99)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need SAT GPA	-0.0005 0.0002 -0.0003	0.00 0.00 0.00	40.60 *** 1.43 0.43	0.50 0.52 0.53
N = 4: Const.	5 ant = 0.69	$F = 15.31$ $R^2 = 0.53$		

TABLE 1c : Probability of Admission (GPA greater than 2.00 and less than 2.54)

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Fin. Need SAT GPA	-0.0002 0.0007 -0.006	0.00 0.00 0.00	2.50 1.12 1.40	0.09 0.11 0.14
N = 4: Const	3 ant = 1.45	F = 2.09 R <sup>2</sup> = 0.14		

## INSTITUTION XXXIII (cont.)

TABLE 1d : Probability of Admission

(GPA greater than 2.55)

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
Fin. Need SAT GPA	-0.0002 0.0004 0.0001	0.00 0.00 0.00	13.91 *** 3.35 * 0.01	
N = 12 Consta	21 ant = 0.57	F = 7.17 R <sup>2</sup> = 0.16		

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	P	Cumulative R Square
SAT GPA Pin. Need	-0.18 -0.12 -0.14	0.12 0.30 0.03	2.13 0.17 25.76***	0.01 0.01 0.20
N =	112 tent = 422.18	F = 9.26 R <sup>2</sup> = 0.20		

TABLE 3 : Percentage of Grant Aid

Variable .	Regression Coefficient	Standard Error	F	Cumulative R Square
SAT GPA Fin. Need	0.09 0.14 -0.01	0.04 0.13 0.01	4.96* 1.25 0.40	0.16 <b>0</b> .18 0.19
N = 44 Consta		F = 3.46 R <sup>2</sup> = 0.19		

# INSTITUTION XXXIII ( cont.)

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
SAT GPA Fin. Need	-0.05 -0.12 -0.01	0.04 0.11 0.01	2.44 1.16 0.32	0.10 0.12 0.13
N = 48 Consta	3 ant = 119.89	F = 2.11 R <sup>2</sup> = 0.13		

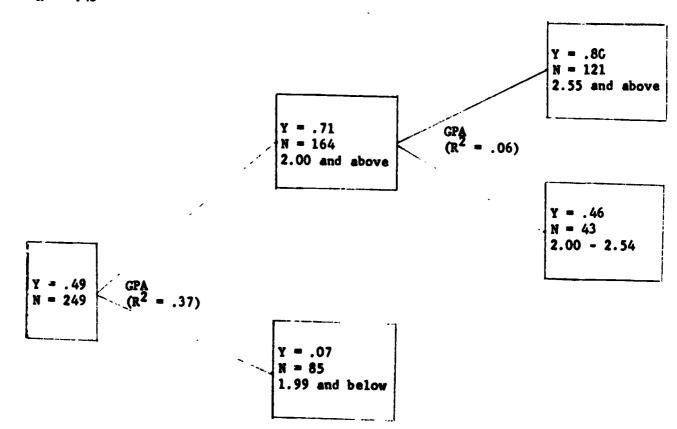
TABLE 5 : Percentage of Job Aid

Variable	Regression Coefficient	Standard Error	7	Cumulative R Square
SAT GPA Fin. Need	-0.03 -0.02 0.02	0.03 0.09 0.01	1.51 0.06 2.66	0.04 0.05 0.10
N = 44 Consta	3 ant = 45.72	F = 1.62 R <sup>2</sup> = 0.10		



TABLE 6: AID Tree

 $Y = Proportion of group admitted <math>R^2 = .43$ 



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#### INSTITUTION XXXIV

TABLE 1: Probability of Admission (Total population)

Variable	Regression Coefficient	Standard Error	F Cumu	lative & Square
Race SAT GPA Fin. Need	-0.09 0.0002 0.001 -0.00002	0.04 0.00 0.00 0.00	4.54 ** 2.90 * 21.16 *** 0.49	0.09 0.12 0.21 0.21
N = 20. Constai	1 nt = 0.55	$F = 12.81$ $R^2 = 0.21$		

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
SAT GPA Fin. Need Race	-0.05 0.19 -0.40 -8.23	0.23 0.54 0.07 93.96	0.04 0.12 31.12***	0.00 0.01 0.16 0.16
N = 18 Constan	3 nt = 630.29	F = 8.23 R <sup>2</sup> = 0.16		

TABLE 3 : Percentage of Grant Aid

Variable	Regression Coefficient	Standard Error	F C	umulative R Square
SAT GPA Fin. Need Race	0.08 0.21 -0.003 11.31	0.03 0.07 0.01 12.47	7.90*** 9.47*** 0.20 0.91	0.08 0.18 0.18 0.19
N = 104 Constar	nt = -89.17	F = 5.80 R <sup>2</sup> = 0.19		

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	F	Comulative R	Square
SAT	-0.01	0.03	0.05	0.00	
GPA	-0.26	0.07	12.85 ***	<b>★</b> 0.13	
Fin. Need	0.002	0.01	0.06	0.13	
Race	-9.14	13.14	0.48	0.14	
N = 100	4 nt = 114.65	$F = 3.94$ $R^2 = 0.14$			

TABLE 5 : Percentage of Job Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
SAT	-0.07	0.03	6.72**	0.09
GPA	0.05	0.07	<b>0.5</b> 0	0.09
Fin. Need	0.001	0.01	0.03	0.09
Race	-2.77	12.34	0.05	0.09
N = 10	4 nt = 74.52	$F = 2.52$ $R^2 = 0.09$		
Consta	nt = /4.32	R - 0.03		

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### INSTITUTION XXXV

TABLE 1 : Probability of Admission

(Total population)

Variable	Regression Coefficient	Standard Error	F (	Cumulative R Square
Rank SAT Fin. Need	-0.46 0.002 -0.0002	0.11 0.00 0.00	19.20 *** 89.92 *** 1.34	
N = 18 Constai	7 nt = -0.40	F = 47.54 $R^2 = 0.44$		

TABLE 2 : Percentage of Need Met

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Rank SAT Fin. Need	-26.58 0.11 -0.12	17.47 0.04 0.02	2.31 9.74*** 41.17***	
N = 110 Constan	6 nt = 135.22	F = 18.47 R <sup>2</sup> = 0.33		

TABLE 3 : Percentage of Grant Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Rank SAT Fin. Need	-43.43 0.04 -0.005	12.45 0.03 0.01	12.17*** 1.68 0.12	0.13 0.14 0.14
N = 95 Constar	nt = 46.24	F = 5.09 R <sup>2</sup> = 0.14		

## INSTITUTION XXXV (cont.)

TABLE 4 : Percentage of Loan Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Rank SAT Fin. Need	-13.02 0.02 -0.004	4.98 0.21 0.01	6.83 <b>*</b> 3.13 <b>*</b> 0.71	
N = 95 Constan	nt = 5.65	F = 3.99 R <sup>2</sup> = 0.12		

TABLE 5 : Percentage of Job Aid

Variable	Regression Coefficient	Standard Error	F	Cumulative R Square
Rank SAT Fin. Need	56.46 -0.06 0.01	13.87 0.03 0.01	16.57 ** 3.24 * 0.38	0.16 0.19 0.20
N = 95 Constan	nt = 48.11	$F = 7.42$ $R^2 = 0.20$		

TABLE I

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FREQUENCY OF INSTITUTIONAL CHANGES IN CSS COMPUTATION OF TOTAL CONTRIBUTION (AND MAGNITUDE)

	Number of Accepted PCS Filers	Number of Upward Adjustments	Percent of PCS Filers	Average Dollar Amount	Number of Downward Adjustments	Percent of PCS Filers	Average Dollar	1
		LARGE PI	LARGE PRIVATE INSTITUTIONS	TUTIONS				1
Institution I	155	38	18%	\$332	21	17.7	6316	ı
Institution IV	131	27	21	96	17	<b>*</b> c	97.7¢	
Institution II	89	45	99	114	> 4	י ע	0 00	
	54	0	0	0	• 0	9 0		
Institution III	217	127	58	363	80	37	364	
AVERAGE	125	47	41%	\$283	26	112	\$179	
		MEDIUM PRIVATE	IVATE INSTI	INSTITUTIONS				
Institution XIII	257	0	70	c v			4	,
Institution VI	122	120	86	3	o c	<b>,</b>	n c	
Institution IX	87	92	87	294	٠ ~	· •	115	
Institution XIV	119	0	0	0	ı c	ı c	3	
	75	0	0	0	0	o c	o c	
	147	135	92	59	12	) oc	172	
	144	21	15	227	1	) <b>(</b> 7	772	
	16	0	0	O	0	0	C	
Institution VII	79	37	47	100	7	თ	ı ır	
Average	116	43	38%	\$141	m	3%	\$146	
		SMALL PRIVATE		INSTITUTIONS				
	156	19	12%	\$628	9	ċ.₹	5183	
	193	109	26	687	67	35	306	
Institution XIX	115	93	81	112	~	) r	326	
Institution XVI	74	S	<b>8</b> 9	750	5 و	٠ <u>٣</u>	250	
Institution XV*	7.5	1	-	8 8	<b>,</b> m	j 4	C C C	
AVERAGE	123	54	43%	\$416	18	12%	\$310	

\* Institution XV allows a \$334 Personal Expense Allowance as a negative contribution to total contribution,

TABLE I (cont.)

ution XXIII 174 10  ution XXI 255 247  ution XXI 201 144  E 200 124  E 200 124  E 200 124  E 200 124  Ition XX 233 28  Ition XXVI 198 38  Ition XXXVI 198 38  Ition XXXV	Upward of PCS Adjustments Filers	Average Jollar Amount	Number of Downward Adjustments	Percent of PCS Filers	Average Dollar Amount
255 247 255 247 171 21 201 144 200 124 91 0 110 21 58 44 168 145 62 446 114 0 56 33 78 2 74 0 66 1	E PUBLIC INSTITUTIONS	TTIONS			
ution XXII     171     21       ution XX     201     144       E     200     124       stion XXX     233     28       ution XXXII     91     0       ution XXXII     110     21       ution XXXII     168     145       ution XXXII     62     44       ution XXXII     168     145       ution XXXII     56     33       ution XXXII     74     0       tion XXXIII     74     0       tion XXXIIII     74     0       tion XXXIIII     74     0       tion XXXIIII     74     0       tion XXXIIII     66     1	6% 97	\$268	25	14,	304
tion XXX 233 28  ttion XXVI 198 38  ttion XXVI 198 38  ttion XXVI 198 31  ttion XXVI 168 145  ttion XXVI 114 0  ttion XXVI 115 56 33  ttion XXVII 25 0  ttion XXXII 74 0  ttion XXXII 74 0  ttion XXXIII 74 0	12 77	332	) 8 8 %	4 W 6	487 630
tion XXX 233 28  ttion XXVI 198 38  ttion XXVII 91 0  ttion XXVII 168 145  ttion XXVII 56 44  ttion XXVII 56 33  ttion XXVIII 56 33  ttion XXXIII 74 0	57%	\$129	18	26	170 \$286
ttion XXX	MEDIUM PUBLIC INSTITUTIONS	TUTIONS			
tion XXV 198 38  ition XXII 91 0  ition XXIV 110 21  ition XXVI 168 145  ition XXVII 56 44  ition XXVII 56 33  tion XXVII 74 0  tion XXXII 74 0	12%	\$380	16	197	06.79
tion XXXII 91 0 ttion XXIV 110 21 ttion XXVI 168 145 ttion XXVII 168 145 ttion XXVII 114 0 ttion XXVIII 56 33 ttion XXXV 25 0 ttion XXXV 25 0 ttion XXXII 74 0 66 1	19	320	15	• / /	\$428 727
tion XXIV 110 21 tion XXVI 58 4 tion XXVI 168 145 tion XXVII 56 44 tion XXVIII 56 33 tion XXVIII 74 0 tion XXXV 25 0 tion XXXIII 74 0 tion XXXIII 74 0 fion XXXIII 74 0	0	C	) c	· c	t 71
tion XXVI 58 4  ttion XXVI 168 145  ttion XXXI 114 0  ttion XXVIII 56 33  ttion XXXV 25 0  ttion XXXV 25 0  ttion XXXIII 74 0	19	285	o w	o ×	) .
tion XXVII 168 145 tion XXIX 62 44 tion XXXI 114 0 tion XXVIII 56 33 tion XXXV 25 0 tion XXXV 25 0 tion XXXII 74 0 tion XXXII 74 0 66 1	7	73	ے ا	, t	191
tion XXIX 62 44  tion XXXI 114 0  tion XXVIII 56 33  tion XXXIV 25 0  tion XXXIV 78 2  tion XXXIV 76 0  tion XXXIII 74 0  tion XXXIII 74 0  tion XXXIII 74 0  tion XXXIII 74 0	86	196		۲,	0 t 7 d
tion XXXI 114 0    tion XXVIII	71	204	n ve	. ב	131
tion XXXIII	0	0	) <b>–</b>	)	200
tion XXXV 25 0 tion XXXIV 78 2 tion XXXIII 74 0 66 1	59	331	0	0	0
tion XXXV 25 0 tion XXXIV 78 2 tion XXXIII 74 0 66 1 TIONAL	30%	\$247	ω	2,9	\$316
tion XXXV 25 tion XXXIV 78 tion XXXIII 74 66 TIONAL	SMALL PUBLIC INSTITUTIONS	TIONS			
tion XXXIII 74 tion XXXIII 74 66 TIONAL	<b>%</b> 0	0	c		,
tion XXXIII 74 66 66 TIONAL 197	• •	225	ۍ «	* •	ۍ د د د
FIONAL 197	0	0	. ~	÷ (r	207 60
TIONAL	12	\$225	2	3%	\$146
	į				
12/ 21	37%	\$202	10	7%	\$255

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TABLE II

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FREQUENCY OF INSTITUTIONAL CHANGES IN CSS COMPUTATION OF PARENTAL CONTRIBUTION (AND MAGNITUDE)

	Number of Accepted PCS Filers	Number of Upward Adjustments	Percent of PCS Filers	Average Dollar Amount	Number of Downward Adjustments	Percent of PCS Filers	Average Dollar Amount
		LARGE PR	LARGE PRIVATE INSTITUTIONS	SNCILL			
Institution I	155	34	227	\$1.70	14	102	8812
Institution IV	131	24	18	104	; c		) }
Institution II	89	٣	7	315	, (~	> <	750
Institution V	24	0	0	0	; o	tc	0,7
Institution III	217	119	55	163	70	32	214
AVERAGE	125	36	20%	159	17	26	\$211
		MEDIUM F	MEDIUM PRIVATE INSTITUTIONS	ITUTIONS			
Institution XIII	257	0	20	0	0	70	0
Institution VI	122	24	20	J	σ	, ,	) o
Institution IX	87	20	57	135	, 61	`[	62
Institution XIV	119	0	0	0	2	;	? <
	75	0	0	0	· c	o c	o c
Institution XII	147	9	7	220	12	α	222
Institution XI	144	20	14	153	9	<b>4</b>	727
Institution X	16	0	0	0	0	· c	) C
Institution VII	79	0	0	0	9	ω	20
AVERAGE	116	11	10%	\$135	5	7,7	\$174
		SMALL PRIVATE	IVATE INSTI	INSTITUTIONS			
	156	17	11%	\$634	\$	3%	\$160
Institution XVIII	193	86	45	142	61	32	318
Institution XIX	115	14	12	391	, (~	)   	326
Institution XVI	74	47	79	790	ָ בַ	) \{	77.7
Institution XV	75	0	0	4 2 3	2 6	7	30
AVERAGE	123	33	26%	\$400	16	11%	\$321

TABLE II (cont.)

	Number of Accepted PCS Filers	Number of Upward Adjustments	Percent of PCS Filers	Average Dollar Amount	Number of Downward Adjustments	Percent of PCS Filers	Average Dollar Amount
			LARGE 1	LARGE PUBLIC INSTITUTIONS	TUTIONS		
	174	7	27	ŝ	ç	ě	
	255	23	<b>.</b> 0	418	57	77	3328
	171	12	7	242	<b>]</b> &	n v	100
AVERAGE	201	œ	7	15	20	3.5	761 730
TO THE PARTY OF TH	200	<b>C1</b>	22	\$282	23	12%	\$334
			MEDIOM	PUBLIC INSTITUTIONS	ITUTIONS		
	233	6	6.7	0119	:		
Institution XXV	198	25	12.	202	71	, v	×470
Institutio XXXII	110	21	1 6	20 C	<b>7</b>	•	452
	. 91	0	0	3	<b>a</b> c	<b>\$</b> (	139
Institution XXVI	85	_	, ~	o q	<b>.</b>	> :	<b>D</b>
Institution XXVII	168	· 6\	1 10	987 787	e ç	0.	298
Institution XXIX	62	- 7	<b>.</b>	7,4	) `	, œ	842
Institution XXXI	114	0	o c	9	<b>†</b> (	·O (	134
Institution XXVIII	56	18	32	236	) C	ဝင္ဇ	C C
AVERAGE	121	10	26	\$171	11	10%	\$507
			SMALL PI	SMALL PUBLIC INSTITUTIONS	rut ions		
	25	0	0.7	0		,	
Institution XXXIV Institution XXXIII	78	7 (	· m ·	225	0 01	<b>)</b> m	0 155
1	5,9	0 -	0	0	2	3	90
	3	-	7.7	\$22\$	فسيو	2%	801\$
INSTITUTIONAL AVERAGE	127	16	12%	\$2.40	12	%8	\$324

TABLE III

FREQUENCY OF INSTITUTIONAL CHANGES IN CSS COMPUTATION OF APPLICANTS SUMMER EARNINGS (AND MAGNITUDE)

	Number of Accepted PCS Filers	Number of Upward Adjustments	Percent of PCS Filers	Average Dollar Amount	Number of Downward Adjustments	Percent of PCS Filers	Average Dollar Amount
			LARGE	PRIVATE	INSTITUTIONS		
	155	2	22	\$240	4	3.5	0000
	131	0	0	<b>.</b>	•		
	89	75	<b>62</b>	100	0	· c	•
	24	0	0	0	0	0	° C
Institution III	217	214	66	120	m	)	225
AVERAGE	125	52	33%	\$118	1	17	\$258
•			MEDI	MEDIUM PRIVATE	INSTITUTIONS		
Institution XIII	257	0	0%	0 8	0	40	
Institution VI	122	1 !0	86	150	o c	<b>.</b>	
Institution IX	87	7.7	68	200	· –	) <del>-</del>	0 0
Institution XIV	119	0	0	9 0	• c	٠ ,	2
Institution VIII	75	0	0	· c	o c	<b>o</b> c	<b>)</b> (
Institution XII	147	147	100	50	o c	o <b>c</b>	o e
Institution XI	144	0	0	0	· c	o c	<b>)</b> (
Institution X	16	0	0	ဂ		o c	י כ
Institution VII	79	37	47	100	0	) C	o c
Average	116	77	27%	\$144	0	20	\$
			SMA	LL PRIVATE	SMALL PRIVATE INSTITUTIONS		
	156	0	20	o •/	_	-	0000
Institution XVIII	193	-	-	, e	٠, ١	٠,	
Institution XIX	115	06	78	8 6	n c	<b>-</b>	007
Institution XVI	74	2	· c	3 0	5 6	<b>)</b>	<b>o</b> (
	75	0	0	<b>o</b> c	o -	o -	0 0
AVERACE	123	10				4	100

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TABLE III (cont.)

	Accepted PCS Filers	Number of Upward Adjustments	Percent of PCS Filers	Average Dollar Amount	Number of Downward Adjustments	Percent of PCS Filers	Average Doller Amount
			<b>X</b>	GE PUBLIC	LARGE PUBLIC INSTITUTIONS		
Institution XXIII Institution XXI	174	0	0 6	0 ;	8		45
	171 201	192	3 4 %	242	0 4 6	04	0 192
AVERAGE	200	130	209	\$11\$	2	12	\$155
			MED	IUM PUBLIC	MEDIUM PUBLIC INSTITUTIONS		
Institution XXX	233	0	0.2	0	,		
	198	-	60	$\simeq$	n <b>c</b>	<b>7</b> C	\$300
Institution XXXII	16.	0 (	0	0	0	0	o c
Institution XXVI	2 <b>8</b>	o -	0 6	0	-	<b>,</b>	200
	168	145	86	3 52	4 (	Γ (	250
Institution XXIX	62	0	30	2	D F	، ۵	<b>C</b> )
	114	0	0	0	7 [	n	125
Institution XXVIII	96	32	57	161	10	· 60	123
AVEKAGE	171	20	172	\$290	2	7.5	\$181
			<b>V</b> KS	LL PUBLIC I	SMALL PUBLIC INSTITUTIONS		
	25	0	<b>7</b>			i	
Institution XXXIV	78	0		<b>&gt;</b>	> -	<b>7</b> 0,	0
Institution XXXIII	74	0	• •	o 0	<b>-</b> c	<b>→</b> ¢	300
AVERACE	99	0	20	0 \$	0	0%	0 0
INSTITUTIONAL	î Ç	!					
AVERAGE	/71	£,	26%	C†1\$		() 	2013

CABLE IV

PREQUENCY OF INSTITUTIONAL CHANGES IN CSS COMPUTATION OF APPLICANTS' ASSETS (AND MAGNITUDE)

	Number of	Manufacture 26			- 1		
	<i>₩</i> ~11	Upward Adjustments	Fercent of PCS Filers	Average Dollar Amount	Number of Downward Adjustments	Percent of PCS Filers	Average Dollar Amount
			LARGE PR	PRIVATE INST	INS TITUT IONS		
Institution I	155	2	7.0	\$ 280	,	76.0	S
Institution IV	131	C		9	<b>n</b> c	"	7
Institution II	89		۰ ـ	2	<b>^</b> -	7 .	23
Institution V	33	· C	• 0	3 0	<b>→</b> 6	4 (	4
Institution III	217	53	26	٥ و	<b>)</b> u	າ (	၁ (
AVERAGE	125	11	52	\$ 28	18	26	\$ 28
			MEDIUM PRIVATE		INSTITUTIONS		
Institution XIII	257	0	20	<b>%</b>		2	S
Institution VI	122	~	2	133	<b>o</b> c	<b>.</b>	:
Institution IX	87	7	۰ ۲	5	، د	٠ *	-\ <sub>1</sub>
Institution XIV	119	O	0	3	77	<b>3</b> <	105
Institution VIII	7.5	0	0	· c	<b>&gt;</b> c	<b>&gt;</b>	<b>)</b>
Institution XII	147	0	0	<b>o</b> C	<b>&gt;</b> =	<b>&gt;</b> (	כ
Institution XI	144		<b>,</b> –	0 (1	> ~	۰ د	<b>7</b> (
Institution X	16	. 3	• <		<b>→</b> (	·	۵
Institution VII	79	00	<b>.</b> 3	) ::	) <b>~</b>	-) -	·
AVERAGE	116	1	12	\$ 385	3	33.	201 8
			SMALL PRI	PRIVATE INSTI	INSTITUTIONS		
	156	2	12	\$ 585	c	1	s
Institution XVIII	193	22	11	372	) r	<b>9</b> 00	
Institution XIX	115	,	. ~	376	<b>n</b> (	<b>7</b>	200
	77	<b>,</b> (	٧ ،	720	<b>ɔ</b> ·	<b>'</b>	႒
	75	<b>)</b> ~	t ~	128	<b>ɔ</b> c	၁ :	'S '
AVERAGE	123	9	2.7	27.7		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	

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TABLE IV (cont.)

	Number of Accepted PCS Filers	Number of Upward Adjustments	Percent of PCS Filers	Average Dollar Amount	Number of Downward Adjustments	Percent of PCS Filers	Average Dollar Amount
			LARGE PUBLIC	SLIC INSTIT	INSTITUTIONS		
Institution XXIII	174	F	2	004		-	
	255	7	ı <b>-</b>	65	<b>3</b> –	<b>→</b> ⊂	0.00
Inscitution XXII	171	7	ব	855	• 0	<b>&gt;</b> C	) (
Institution XX	201	2	1	90	) <b>)</b>	ာဂ	o c
AVERAGE	200	9	2%	\$ 536		20	0
			MEDIUM PU	MEDIUM PUBLIC INSTITUTIONS	TUTIONS		
Institution XXX	233	17	21	\$ 5.18	-	300	\$ 225
Institution XXV	198	13		545	<b>→</b>	<b>*</b>	075
Institution XXXII	91	0	0	0	• C	o c	) (
	110	0	0	0	0	<b>&gt;</b> C	o c
	28	7	~	70	· ~	<b>)</b> 4	) ·:
Institution XXVII	168	0	~	0	· c	r C	) C
Institution XXIX	62	<b>*</b> 1 <b>7</b>	99	200	<b>.</b>	<b>o</b> c	י כ
Institution XXXI	114	0	0	0	0	<b>)</b> (**	•
Institution XXVIII	56	O	C.	2	· つ	<i>(</i> 2)	
AV erase	121	σc	34	\$ 334	0	17.5	•
			SMALL PUB	PUBLIC INSTITUTIONS	TIONS		
Institution XXXV	25	0	70	s		Ĉ	\( \text{\text{\$\sigma}} \)
Institution XXXIV	7.8	0 (	0	00	ော	• •	n
AVEDACE	4/	0	0		0	၁	O
	00	<b>ɔ</b>	20	o \$	၁	); <u>.</u>	٠ ٢
INSTITUTIONAL AVERAGE	127	ų	į	e de	•		
	171	^	47,	× 363	m	7%	いさ

\*Term fime Earnings

	6	>
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	2	2
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Number of CSS Com-   Students   Pute.	CSS Compute.  Total Need  3307,940  370,459  442,390  163,404  107,385	CSS Com- puted Average Need  LAR : PRIVATE 1,986 1,861 2,038 2,403	Institu- tional Total Need	(b) Institu- tionel Average Need	(C) as a
I 155 IV 199 III 217 II 68 V 54 XXIII 257 XXIII 257 XXIV 119 VIII 147 XXIV 116 XXIII 75 XXIII 147 XXIII 14	3307,940 370,459 442,390 163,404 107,385	Average Need  LAR TE PRIVATE  \$ 1,986 1,861 2,038 2,403	Total Need	Clonel Average Need	00040000
1   155   111   199   111   217   68   68   7   54   54   54   54   54   54   54	\$307,940 370,459 442,390 163,404 107,385	\$ 1,986 1,861 2,038 2,403	TWETTTIME		of (A)
1   155   111   199   199   111   217   68   54   54   54   54   54   54   54   5	\$307,940 370,459 442,390 163,404 107,385		C.O. 101 : 1611		
VI 217  III 68  VI 54  XIII 28  XIII 257  XXIII 257  XXIV 119  YIII 147  X 16  VI 79  XI 144	370,459 442,390 163,404 107,385		\$299,890	\$ 1.928	\$2.0
VI 122 \$  VI 122 \$  XIII 257  XIII 257  XX XIII 257  XX XIII 119  VIII 147  X 16  VII 147  X 16  VII 147  X 16  VII 16  VII 16  VII 16	442,390 163,404 107,385 2268,801	2,038 2,403	368,473	_	66
VI 122 \$  VI 257  XXII 257  XXV 119  VIII 147  X 16  X 16  VIII 79  XXII 147  X 16	163,404 107,385	2,403	413,270	1.904	( E)
VI 122 \$  XIII 257  XXIV 87  XIV 119  VIII 147  X 16  VII 79  XII 147  X 16  X	107,385	60	157,624	2,318	96
VI 122 % XIII 257 IX 87 XIV 119 VIII 147 X 16 VII 79 XI 16 X	<b>368</b> 801		107,385	1,988	100
VI 122  XIII 257  IX 87  XIV 119  VIII 147  X 16  VII 79  XI 144  X 16	\$268,801	PEDIUM PRIVATE	: INSTITUTIONS	10	
XIII 257  ZX 87  XIV 119  YIII 75  XII 147  X 16  VIX 79  XI 144		\$ 2,203	\$252,601	\$ 2.075	7,75
XIX 119 XIII 147 X 16 X 16 X 16 X 172 X 16 X 173 X 144	439,420	1,709	439,40		100
XIV 119 75 XII 147 X 16 VII 79 XII 144	145,920	1,677	123,800	1,423	. ₩1 ₩1
XII 147 X 16 VII 79 XI 144 XI 144	189,567	1,593	189,567	1,593	100
XI 147 2 X 16 X VII 79 1 XI 144 2	130,650	1,742	130,650	1,742	100
X 16 VIX 79 1 XI 144 2	256,221	1,743	252,840	1,720	66
VII 79 138 XI 144 269		296	15,480	296	100
XI 144 2	ď	1,749	134,940	1,708	86
	269,250	1,869	267,396		6 <b>ó</b>
		SMALL PRIVATS	SNOT TUTITSNI		
XVII 888	\$190,696	\$ 2,167	\$184,326	\$ 2.094	
Institution XVIII 193 284,	284,482	1,474	269,042		50
	156,406	2,113	123,651	1.671	67
118	118,970	1,586	119,120	1,588	100
Institution XIX 115 260,	260,360	2,264	250,355	2,177	٧. •
			•		



ı		1	i	, , , ,
(C) as a Percentage of (A)		967 98 105 93		987 83 100 97 98 100 91 100 88 100 100
(D) Institu- tional Average Need	NSTITUTIONS	\$ 676 560 641	UTIONS	\$ 802 715 941 1,217 572 783 497 988 816 816 \$ 1,025 \$ 1,025
(C) Institu- tional Total Nee.		PUBLIC INSTIT	\$115,874 112,714 111,676 163,925	MEDIUM PUBLIC INSTITUTIONS
(B) CSS Computed Average Nce.	LARGE P	\$ 701 570 613 718	MUIGEM	\$ 818 \$57 940 1,247 583 783 543 985 919 SMALL SMALL
(A) CSS Com- puted Total Need		\$119,970 114,712 106,760 183,210		\$190,610 144,070 108,102 /2,329 115,450 71,253 59,818 61,080 51,511 \$ 25,645 \$ 25,645
Number of Students		171 201 174 255		233 \$19 108 14 115 10 58 / 198 11 91 7 110 5 62 6 56 5 56 5
		Institution XXII Institution XXII Institution XXIII Institution XXIII		Institution XXX Institution XXVII Institution XXVI Institution XXVI Institution XXIV Institution XXIX Institution XXIX Institution XXIX Institution XXXII Institution XXXIII Institution XXXIII Institution XXXIII Institution XXXIII Institution XXXIII Institution XXXIII

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TABLE V (cont.)